REPORT

Hatay Dörtyol-Hassa Highway and Railway Tunnel Construction Works Project (25km)

Environmental and Social Impact Assessment - Non-Technical Summary

Submitted to:

DOĞUŞ - EZE Joint Venture

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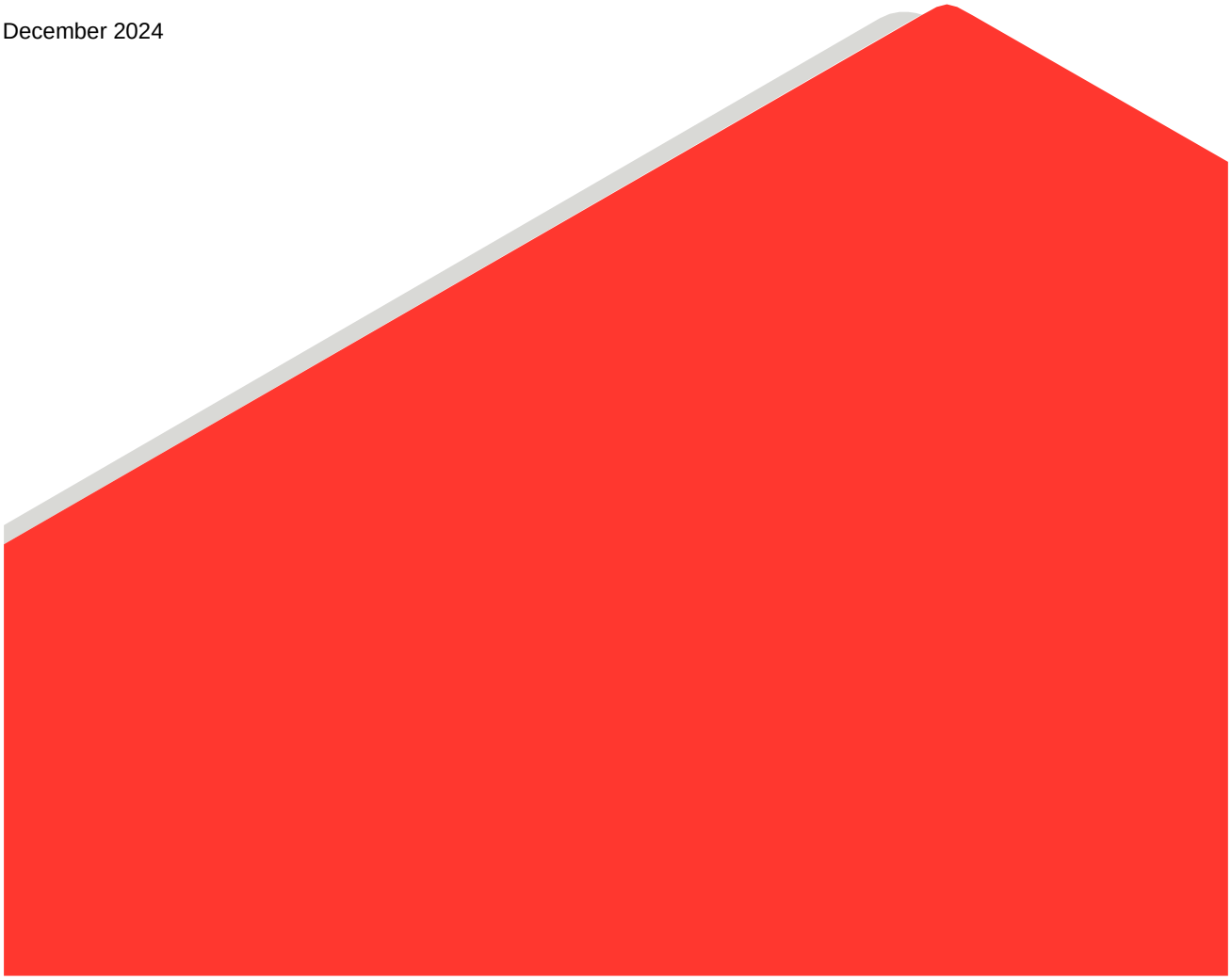
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Acronyms and Abbreviations

AoI	Area of Influence
AYGM	General Directorate of Infrastructure Investments
BAT	Best Available Technique
CH	Critical Habitat
CIA	Cumulative Impact Assessment
DOĞUŞ-EZE JV or Client	DOĞUŞ-EZE Joint Venture
DSI	State Hydraulic Works
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
EIA	Environmental Impact Assessment
EN	Endangered
EP	The Equator Principles
EPFIs	Equator Principles Financial Institutions
ESAP	Environmental and Social Action Plan
ESIA	Environmental Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ETL	Energy Transmission Line
EU	European Union
GHG	Greenhouse Gas
GIIP	Good International Industry Practices (GIIP)
GM	Grievance Mechanism
GWP	Global Warming Potential
HRIA	Human Right Impact Assessment
HSR	High-speed Railway
IFC	International Finance Corporation
ILO	International Labour Organization
İsdemir	İskenderun Demir ve Çelik A.Ş.

KGM	General Directorate of Highways
KPIs	Key Performance Indicators
LMP	Labour Management Plan
LRP	Livelihood Restoration Plan
LSA	Local Study Area
MoEUCC	Ministry of Environment, Urbanization and Climate Change
MoTI	Ministry of Transport and Infrastructure
NATM	New Austrian Tunnelling Method
NGO	Non-Governmental Organization
NT	Near Threatened
NTS	Non-technical Summary
O.G.	Official Gazette
PAP	Project Affected People
PPE	Personal Protective Equipment
PPM	Public Participation meetings
PSs	Performance Standards
SEP	Stakeholder Engagement Plan
SIA	Social Impact Assessment
TBM	Tunnel Boring Machine
TCDD	Turkish State Railways (Türkiye Cumhuriyeti Devlet Demiryolları)
the Project or Dörtyol-Hassa Project	Hatay Dörtyol-Hassa Highway and Railway Tunnel Construction Project
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
VU	Vulnerable
WHO	World Health Organization
WWTP	Wastewater Treatment Plant

1.0 INTRODUCTION

1.1 Project Background

The DOĞUŞ-EZE Joint Venture (“DOĞUŞ-EZE JV” or “Client”) hired WSP Türkiye to conduct the Environmental and Social Impact Assessment (ESIA) for the 25 km Hatay Dörtyol-Hassa Highway and Railway Tunnel Construction Project (herein after “the Project” or “Dörtyol-Hassa Project”). The Project aims to build a 2x2 highway and a single-track railway to provide a more direct link between the Gulf of Iskenderun and Southeastern Anatolia. The main feature is approximately 20 km tunnel with three tubes. Construction will cover KM 0-25, ending at the Hassa junction with the D825 State Road.

Originally known as the Dörtyol-Hassa Highway Project, it was planned by the Turkish Ministry of Transport and Infrastructure (MoTI), General Directorate of Highways, 5th Regional Directorate. A Project Information File (PIF) was submitted to the Hatay Provincial Directorate of Environment, Urbanisation, and Climate Change, leading to the issuance of a "No Environmental Impact Assessment (EIA) Required" decision on March 20, 2019.

According to Article 17 of the EIA Regulation, if a project that received an "EIA Not Required" decision does not start within five years (without a force majeure), the decision becomes invalid. Due to this, an application was submitted to the Hatay Provincial Directorate of Environment, Urbanization, and Climate Change (PDoEUCC) to extend the "EIA Not Required" decision. The PDoEUCC granted the extension, citing the COVID-19 pandemic and the major earthquake centered in Kahramanmaraş, which affected 11 provinces. As a result, the "EIA Not Required" decision dated March 5, 2019, was extended until March 5, 2025.

The responsibility for the design, engineering, procurement, and construction of the Project was transferred from the MoTI to the General Directorate of Infrastructure Investments (AYGM) on May 12, 2022. Once the final route is approved, AYGM will apply to the Ministry of Environment, Urbanization and Climate Change (MoEUCC) to validate the "EIA Not Required" decision, considering any changes to the Project and its stakeholders.

1.2 Project Owner

The MoTI is the Project owner. The Engineering, Procurement, and Construction (EPC) contract was signed between the AYGM of MoTI and the DOĞUŞ-EZE JV on February 23, 2024, for the Project. Once construction is completed, the Project will be handed over by AYGM to MoTI, specifically to the Turkish State Railways (TCDD) and General Directorate of Highways (KGM), including all structures and components covered in the EPC contract. TCDD and KGM will be responsible for operating the Project, with DOĞUŞ-EZE JV having no involvement in the operational phase.

1.3 Project Parties

Based on the information provided by DOĞUŞ-EZE JV, the roles and the main responsibilities of the Project parties are summarized in Table 1-1 below.

Table 1-1: Project Parties

Parties	Responsible Party	Main Role & Responsibilities
Project Owner	Republic of Türkiye Ministry of Transport and Infrastructure (MoTI)	■ Owner of the Project.
Employer – Responsible for Construction	General Directorate of Infrastructure Investments (AYGM)	■ To prepare or get prepared and approve the plans and projects of highways, railways, logistic villages, centres or bases, ports, shelters, coastal structures, airports to be built by the state, constructing and / or

Parties	Responsible Party	Main Role & Responsibilities
		having the transportation infrastructures built, transferring the completed projects to the relevant institutions. ■ Developing EPC model to ensure the construction of transportation infrastructures, negotiating with individuals and legal entities. ■ To prepare expropriation files and conduct expropriation.
Operator of the Railway	Turkish Republic State Railways (TCDD)	■ Operation of the Railway.
Operator of the Highway	General Directorate of Highways (KGM)	■ Operation of the Highway.
EPC Contractor	DOĞUŞ-EZE Joint Venture	■ Development of the Project design ■ Construction of the Project
ESIA Consultant	WSP Türkiye (Independent national and international environmental and social consulting firm)	Preparation of: ■ ESIA Scoping Report ■ ESIA Report ■ Stakeholder Engagement Plan (SEP) ■ Non-Technical Summary (NTS) ■ Livelihood Restoration Plan (LRP) ■ Biodiversity Management Plan (BMP) ■ Cultural Heritage Management Plan (CHMP) including Chance Find Procedure ■ Other Management Plans

1.4 Project Rationale

According to the “Dörtyol-Hassa Railway and Highway Survey Project and Engineering Services Work Feasibility Study” prepared by Emay (2022), the updated 2019-2023 Strategic Plan of Türkiye's Ministry of Transport and Infrastructure (MoTI) includes a key objective to develop transportation infrastructure in a planned, integrated manner, with a focus on railways. It also aims to create a safer and more reliable alternative to the non-standard Belen Pass.

The strategic goals include:

- Purpose A1: To plan transportation infrastructures that integrate all modes of transport with a priority on railways.
  - Target H1.2: To expand and upgrade the railway network and urban rail systems to meet national needs.
  - Target H1.4: To connect more ports, industrial facilities, and logistics centers to local and international rail corridors.
  - Target H1.6: To ensure the expansion of a high-speed, safe railway network.
- Purpose A3: To provide sustainable, uninterrupted transportation services that ensure the highest levels of life and property safety.
  - Target H3.4: To enhance combined cargo transport at national and international levels and regulate the safe transport of hazardous and perishable goods.

A PESTLE analysis was conducted by the Ministry to assess political, economic, sociocultural, technological, legal, and environmental factors influencing the Project. Key actions identified include:

- To implement regulations to quickly respond to global economic changes, focus on domestic production, and prioritize infrastructure projects supporting local industry.
- To establish an integrated transportation system to address the budget and traffic safety issues of road transport.
- To prioritize cost-effective investments and efficient use of public resources.
- To strengthen traffic safety culture through media campaigns, training, and awareness programs in coordination with stakeholders.
- To ensure coordination between local governments and MoTI for city crossings and ring road projects.
- To include public input in planning and investment decisions and conduct awareness activities.
- To update zoning regulations to prevent development near ring roads.
- To organize design competitions and surveys in areas where natural habitats might be affected.
- To adjust freight routes to align with shifting industrial and production areas.

1.5 The Goal of this Document

An ESIA study has been conducted by WSP Türkiye regarding the realization of the Dörtyol- Hassa Project. This document, non-technical summary (NTS) of the ESIA, aims to summarize the ESIA findings, which was conducted according to the national and international regulations and standards of international Lenders, and mitigation measures for the management of the Project's environmental and social issues which was proposed by DOĞUŞ-EZE JV; and aims to provide clear and valid information for the stakeholders by using a non-technical language.

1.6 Standards to be Applied in the Project

The DOĞUŞ-EZE JV commits to following all applicable Turkish laws and regulations for the entire duration of the Project. This includes, but is not limited to, the Environment Law, Occupational Health and Safety Law, Labour Law, and other applicable Turkish legislation. In addition, the Project will meet the standards set by the

International Finance Corporation (IFC) Performance Standards (PSs), the Equator Principles (EP), and European Union (EU) regulations, along with Turkish legal requirements.

1.7 Project Categorisation

According to the IFC's Policy on Environmental and Social (E&S) Sustainability (January 2012), the IFC evaluates environmental and social risks and impacts of proposed investments by categorizing them to reflect the severity of these risks. The assigned category also determines the disclosure requirements based on IFC's Access to Information Policy. Projects are divided into four categories:

- **Category A**: Projects with potentially significant adverse environmental and social risks or impacts that are diverse, irreversible, or unprecedented.
- **Category B**: Projects with potentially limited adverse risks or impacts that are generally site-specific, reversible, and can be managed with mitigation measures.
- **Category C**: Projects with minimal or no adverse environmental or social risks or impacts.
- **Category FI**: Projects involving investments in financial intermediaries or mechanisms that involve financial intermediation. This category is further subdivided into three risk levels (FI-1, FI-2, FI-3).

Based on the criteria above, and WSP's experience with similar projects that pose comparable environmental and social risks, this Project is proposed to fall under **Category A**.

2.0 PROJECT DESCRIPTION

2.1 Project Overview and the Location

The construction of the highway and railway aims to establish a more direct route between the Gulf of Iskenderun and the Southeastern Anatolia Region. This Project seeks not only to expand the hinterland of Iskenderun Port but also to:

- Shorten the Kırıkhan-İskenderun-Dörtyol route (currently 77.3 km) by 15.3 km.
- Reduce the Nurdağı-Osmaniye-Dörtyol (Payas) route (121 km) by 20.6 km.
- Cut the Dörtyol-Kırıkhan-Hassa route (78.8 km) by 53.4 km.
- Shorten the railway route between Payas and Fevzipaşa (84 km) by 29.6 km.

This will result in safer, more comfortable, and uninterrupted transportation.

The Project involves the construction of a 1x1 single railway line, a 2x2 highway (motorway), and a tunnel with three separate tubes (see Figure 2-1). The planned lane width for the highway inside the tunnel is 3.50 meters, and outside the tunnel, it will be 3.75 meters, in line with highway standards. The tunnel is approximately 20 km long. Key Project details include:

- The highway is 26 km in length.
- The railway, used only for freight trains, is 23.5 km long.
- The highway connects to the existing O-53 highway at the tunnel entrance and to the D-825 state road at the exit.
- The railway links to the TCDD transmission line and ends near Deliçay Village.
- The left tunnel tube accommodates the two-lane highway, stretching from km 2+698.88 to km 21+670.00.

- The middle tube contains the single-track railway, running from km 2+571.00 to km 21+350.00.
- The right tube holds another two-lane highway, running from km 2+698.88 to km 21+460.00.

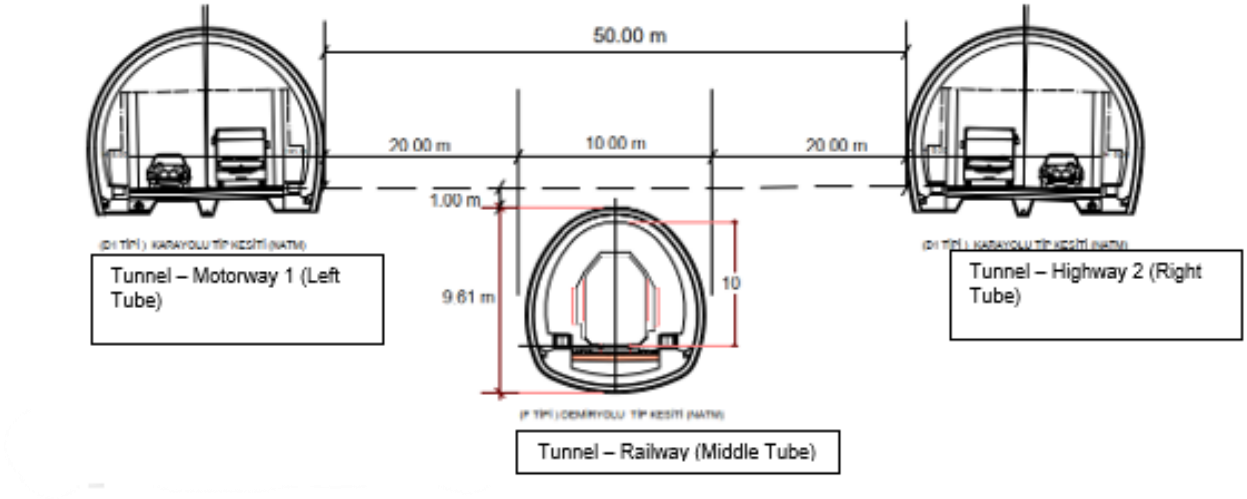


Figure 2-1: Illustration of the Tunnels

The Project is located in Türkiye's Hatay Province, linking the Gulf of Iskenderun to the Southeastern Anatolia Region. It begins in the Dörtyol District and ends in the Hassa District, with a total tunnel length of approximately 20 km (see Figure 2-2). The Project layout, along with related facilities and suppliers, is shown in Figure 2-3, while the closest settlements to the Project area are detailed in Figure 2-4.

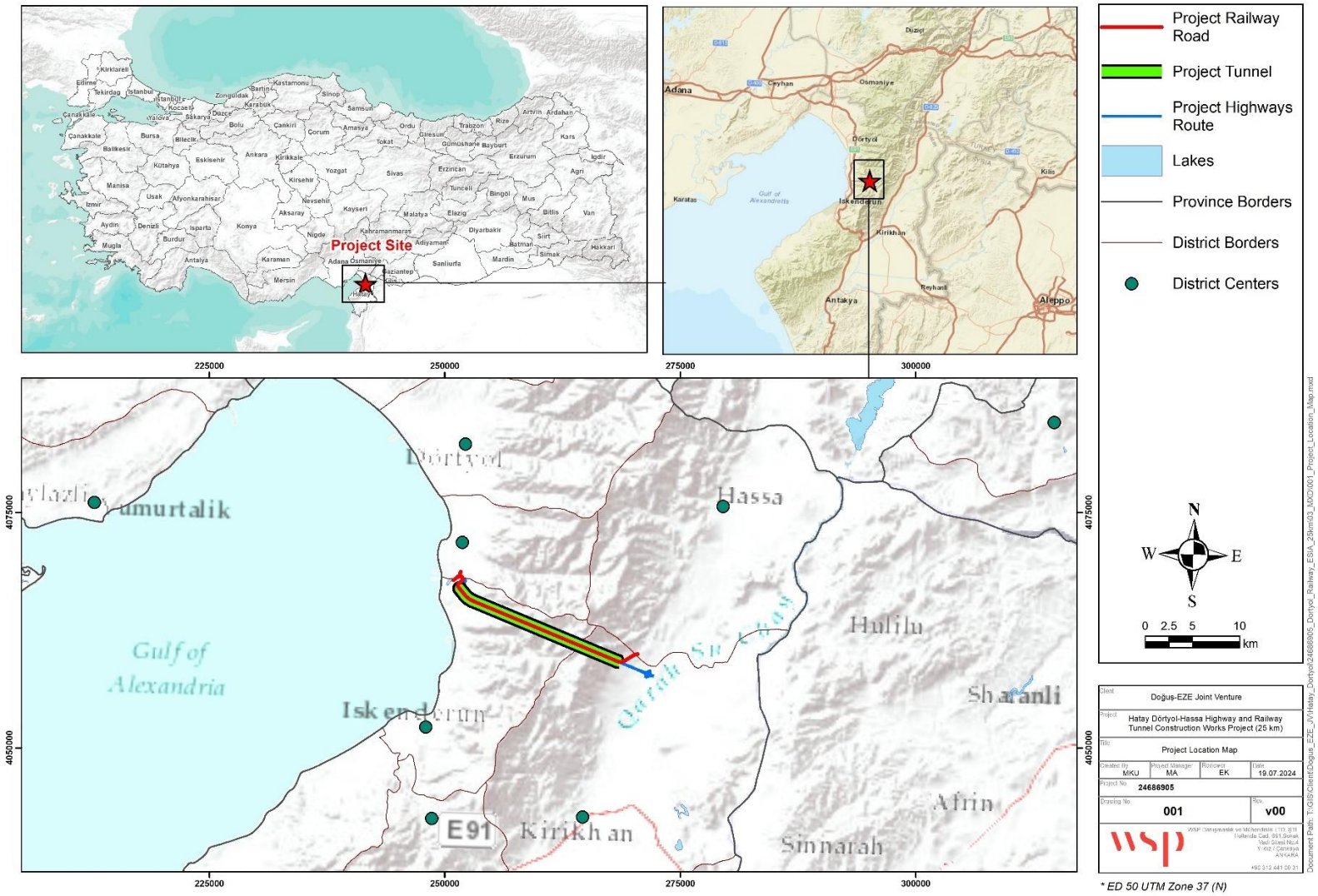


Figure 2-2. Project Location

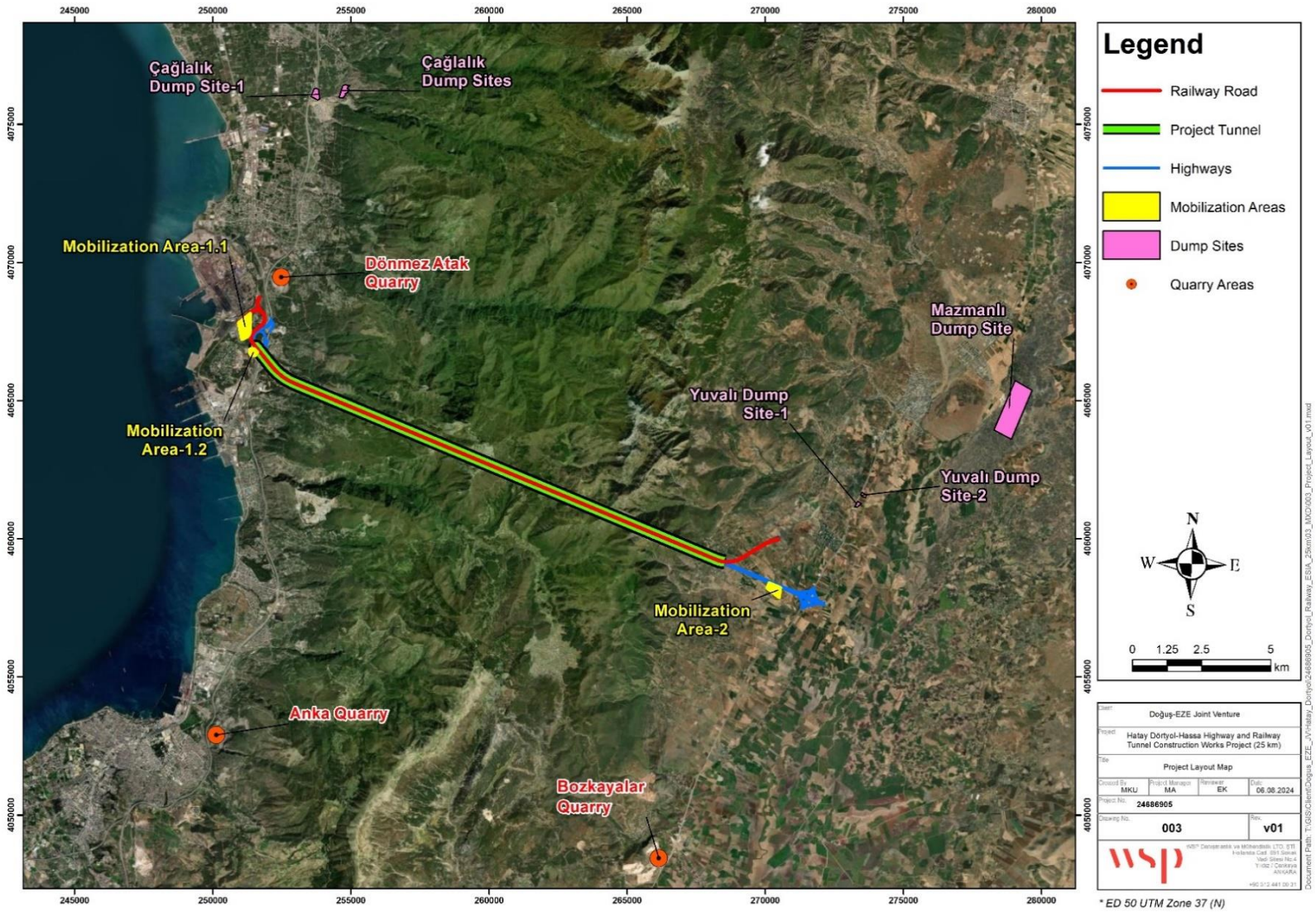


Figure 2-3. Project Layout with Associated Facilities and Supplier Facilities

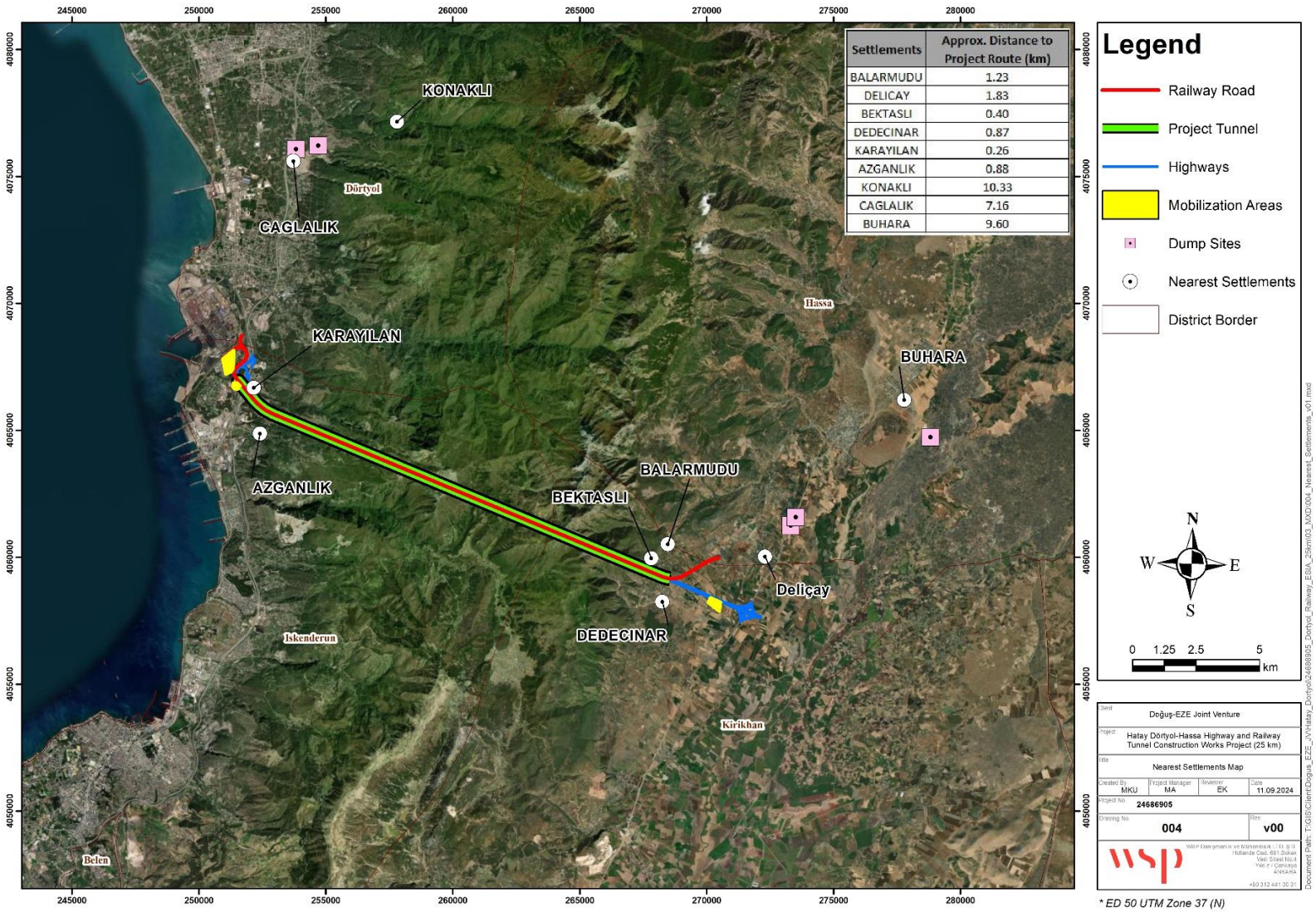


Figure 2-4. Nearest Settlements around the Project Area

The tunnel entrance of the Project begins within the borders of İskenderun Demir ve Çelik A.Ş. (İsdemir), and the exit connects to the Hassa Junction with the D825 State Road, where the highway and railway diverge. A temporary container city, established by İsdemir for its employees after the February 2023 earthquakes, lies within the Project area. This container city, along with olive groves in the direction of Hassa District, will be partially expropriated, though expropriation has not yet begun. Discussions with relevant authorities are ongoing.

Nearby borrow sites, quarries, and other facilities like camp sites, concrete batching plants, and precast plants required for construction are identified in the Project area (see Figure 2-3). The nearest settlements to the Project route include Karayılan, Bektaşlı, Deliçay, Balarmudu, Dedeçınar, Buhara, Çağlalık, and Konaklı Neighborhoods (see Figure 2-4). The tunnel in the Dörtyol District is planned to run underground, so no buildings, apart from the container city within İsdemir site, are expected to be demolished.

2.2 Project Components

2.2.1 Railroad and Motorway Design, Structures and Key Infrastructure

To carry out the impact assessment of the Project, the primary "Project components" for each phase (construction, operation, and decommissioning) were identified. The Project involves building a 1x1 single-track railway line, a 2x2 highway (motorway), and a tunnel with three separate tubes. As part of the Project, the following structures will be constructed.

Table 2-1: Project Structures

Type of Structure	Number
Tunnel	1
Underpasses	6
Overpasses	1
Motorway Highway Entrance and Exit toll gates	3
Interchange - Motorway	2
Culvert	5

- **Overpass**: A structure, such as a bridge or railway, that crosses over another road or railway.
- **Underpass**: A road or pedestrian passage in a tunnel that runs beneath a road or railway.
- **Culvert**: A structure allowing water to flow beneath a road, railway, trail, or similar obstacle from one side to the other.
- **Interchanges**: These are designed to connect the motorway to the existing and planned road networks in the region. The location of the interchanges is determined by the alignment of the new route in relation to the existing road network, and their design considers the ranking of secondary roads. Interchanges are designed with full connections, and their dimensions depend on spatial constraints.

The following tables include a list of the planned overpasses, underpasses, and interchanges for the Project. The highway lane width will be 3.50 m inside the tunnel and 3.75 m outside. The final width of the overpasses and underpasses will be determined after detailed design and engineering studies are completed.

Table 2-2:Detailed Information of the Tunnel

Tubes of the Tunnel	Type	Kilometres	Width (m)	Length (m)	Construction Method
Left Tube	Motorway	2+698.88 - 21+670.00	2 lanes	18,971.12	TBM* (External Diameter 13.10 m)
Middle Tube	Railway	2+571.00 - 21+350.00	1 lane	18,779.00	NATM ** (between 2+571 and 14+639 km) and TBM (External Diameter 9.5 m) (between 14+639 and 21+350 km)
Right Tube	Motorway	2+698.88 - 21+460.00	2 lanes	18,761.12	NATM

* Tunnel Boring Machine

** New Austrian Tunnelling Method

Table 2-3: List of Overpasses of the Project

Name	Kilometres	Location
Overpass-1	22+040	Motorway
Overpass-2	22+040	Motorway
Overpass-3	24+645	Motorway
Overpass-4	24+645	Motorway

Table 2-4: List of Underpasses of the Project

Name	Kilometres	Location
Underpass-1	21+490	Railway
Underpass-2	23+058	Railway
Underpass-3	23+220	Railway
Underpass-4	22+490	Motorway
Underpass-5	22+840	Motorway
Underpass-6	25+300	Motorway

Table 2-5: List of Interchanges of the Project

Kilometres	Interchange List
Motorway - 0+000	O-53 Highway Interchange
Motorway – 24+645	D-825 State Road Interchange

2.2.2 Energy Transmission Line and Substations

During construction phase of the Project, existing energy transmission lines will be used, and no new transmission line and/or substation construction is expected. Client has already made applications for Electricity Grid Connection permissions to the related authorities.

2.2.3 Quarries and Borrow Pits

The quarries intended for use in the Project are existing sites. After evaluating their capacities and availability, the Client determined that they have enough material to meet the Project's needs, and no increase in capacity is expected. As a result, these quarries are considered part of the supply chain rather than associated facilities. However, emissions from trucks transporting materials from the quarries will be accounted for and assessed in the relevant sections, especially when these trucks leave the paved state roads and enter the Project site.

Table 2-6: Information regarding Existing Quarries

Name	District	Status
Dönmez Atak Quarry	Payas	Existing – Capacity is confirmed-to be assessed as Supplier
Anka Quarry	İskenderun	Existing – Capacity is confirmed-to be assessed as Supplier
Bozkayalar Quarry	Kırıkhan	Existing – Capacity is confirmed-to be assessed as Supplier

2.2.4 Camp Sites and Storage Areas

In the context of the Project's construction activities, there will be two mobilization areas, two campsites and five storage areas of which currently planned locations are given in the following table. Camp Sites will be in the Mobilization areas. Accommodation capacity of Camp Site 1 and 2 will be 700 and 550 people, respectively.

Table 2-7: Campsite and Storage Areas

Description	Location
Mobilization Area-1	Hatay Province /İskenderun District/ Karayılan Neighbourhood
Mobilization Area-1	Hatay Province / Kırıkhan District / Bektaşlı Neighbourhood
Camp Site-1	will be in the Mobilization Area-1
Camp Site-2	will be in the Mobilization Area- 2
Excess Excavated Material Storage Areas	
Storage Area-1 – Çağlalık Dump Site	Hatay Province/ Dörtyol District/ Konaklı Neighbourhood
Storage Area-2 – Çağlalık Dump-Site 1	Hatay Province/ Dörtyol District/ Konaklı Neighbourhood
Storage Area-3 – Yuvalı Dump Site-1	Hatay Province/ Hassa District/ Yuvalı Neighbourhood
Storage Area-4 – Yuvalı Dump Site-2	Hatay Province/ Hassa District/ Yuvalı Neighbourhood
Storage Area-5 – Mazmanlı Dump Site	Hatay Province/ Hassa District/ Mazmanlı Neighbourhood

According to the information given by the Client, as a priority, it is aimed to acquire related permission Storage Area-1 and Storage Area-5 before construction begins. Therefore, the existing storage areas namely, Storage

Area 2-3-4 may not be used since the capacity of Storage Area 1 and Storage Area 5 would provide enough space for the storage of excavated materials originated from Project construction activities.

2.2.5 Other Temporary Facilities

Proposed concrete batching, precast plants and crushing and screening plants, which are located in the mobilization areas, to be used in the construction phase of the Project are presented in Table 2-8.

Table 2-8: Other Temporary Facilities

Facility	Number	Location	Status (Existing/New)
Concrete Batching Plants	2	There will be one concrete batching plant at each mobilization area	New
Precast Plants	2	There will be one precast plant at each mobilization area	New
Crushing and Screening Plants	2	There will be one crushing and screening plant at each mobilization area	New

2.2.6 Access Roads

During construction, access roads will be needed to connect the Project facilities to existing local and national roads. All the required access roads for the Project already exist. If necessary, some improvements and extensions will be made to these existing roads. The exact length of the temporary access roads is not yet known, but any required enhancements will be carried out as needed.

2.3 Third Party Utilities

In linear development projects, the route often passes through third-party utilities that are either already built or are planned to be. These third-party utilities could be bridges, railroads, dams, pipelines, groundwater wells telephone cables, overhead power lines, etc. The known gas pipeline, powerline, road, and railroad crossings are listed in the tables below. According to the information acquired from the Client, there are no crossing points/overlaps with the overhead power lines and the Project Route.

Table 2-9: River Crossings

Name	Type of Crossing	Km
Stream Crossing-1	Derivation	Railway – 021+930
Stream Crossing-2	Culvert	Railway – 022+300
Stream Crossing-3	Culvert	Railway – 023+380
Stream Crossing-4	Culvert	Railway – 023+550
Stream Crossing-5	Derivation	Motorway – 22+250
Stream Crossing-6	Culvert	Motorway – 023+695
Stream Crossing-7	Culvert	Motorway – 024+180

Table 2-10: Road Crossing

Name	Type of Crossing	Km
Road Crossing-1	Pass	Motorway – 022+040
Road Crossing-2	Underpass	Railway – 023+220
Road Crossing-3	Underpass	Railway – 023+058
Road Crossing-4	Underpass	Railway - 021+940
Road Crossing-5	Underpass	Highway - 022+840
Road Crossing-6	Underpass	Highway – 022+490
Road Crossing-7	Underpass	Highway – 025+272
Road Crossing-8	will be clarified	Highway (1)– 000+175
Road Crossing-9	will be clarified	Highway (1)– 000+475
Road Crossing-10	will be clarified	Highway (1)- 000+750
Road Crossing-11	will be clarified	Highway (2)– 000+475
Road Crossing-12	will be clarified	Highway (2)- 001+017

Table 2-11: Gas Pipeline Crossings

Name	Km
Gas Pipeline Crossing-1	Highway&Railway – 002+698
Gas Pipeline Crossing-2	Highway (1) – 000+780
Gas Pipeline Crossing-3	Highway (2) – 001+022

2.4 Alternative Analysis

In the initial phases of the Project, various alternatives for layout and technology are being examined. According to IFC Performance Standard 1 (PS1), a comprehensive justification for these alternatives must be provided through the identification and assessment of environmental and social risks and impacts. As a result, the ESIA report will include a detailed analysis of the no-project alternative, along with alternatives related to the Project area and technology.

2.4.1 No-Project Alternative

The "no-project alternative" indicates that the Project will not be executed, meaning no construction activities will take place. As a result, there will be no associated positive or negative environmental and social impacts or risks, and nearby communities and the government will not benefit socio-economically.

As the Southeastern Anatolia Region secures the necessary ports in Iskenderun, the transfer of freight traffic from Mersin to Iskenderun raises the need to reassess the existing road connections to Iskenderun. Currently, the highway and rail infrastructure in Hatay Province is underdeveloped compared to Türkiye's transportation demands. This Project aims to create a highway and railway connection between the Gulf of Iskenderun and the Southeastern Anatolia Region.

The new railroad, highway, and tunnel in the Hatay region are expected to offer numerous benefits. The Project is anticipated to significantly reduce exhaust gas emissions from vehicles and lower Greenhouse Gas (GHG) emissions by shortening commute times and easing transportation. Additionally, reducing vehicular traffic in residential areas will enhance community safety. Improved transportation infrastructure will also likely boost economic development, increase connectivity, and improve the overall quality of life for residents.

2.4.2 Existing Route Alternatives

According to the "Dörtyol-Hassa Railway and Highway Survey Project and Engineering Services Work Feasibility Study" prepared by Emay (2022), traffic predictions were made based on initial and final surveys conducted in the sections between Kırıkhan, İslâhiye, Nurdağı, and Osmaniye-Bahçe. This analysis aimed to compare the feasibility of the Dörtyol-Hassa Project against maintaining the current conditions. Using the established start-end matrices, two different state road routes were identified for the Dörtyol-Hassa Road based on the directional distribution of transit traffic: the Kırıkhan-İskenderun-Dörtyol State Road route and the Nurdağı-Osmaniye-Dörtyol State Road route.

Additionally, the Nurdağı-Osmaniye-Dörtyol (Payas) Highway Route, which serves as an alternative to the Nurdağı-Osmaniye-Dörtyol State Highway route, was also included in the economic analysis. However, since the start-final survey could not be performed on this highway, the results from the Nurdağı-Osmaniye-Dörtyol State Highway survey were proportionally applied to the highway.

In estimating traffic for the Dörtyol-Hassa Connection, it was assumed that the capacity of the Gaziantep Organized Industrial Zone would grow at the same rate as its expansion, and additional traffic would arise from the planned Polateli Organized Industrial Zone. The implementation of the Project is expected to significantly boost industry and agriculture in the region, contributing to the development of trade and tourism.

Traffic forecasts accounted for the fact that the new road would generate traffic upon its opening. Consequently, the following routes were compared as alternatives to the Dörtyol-Hassa Project versus maintaining the current situation:

- Antakya (Top Boğazı)-Iskenderun-Payas State Road Route
- Nurdağı-Osmaniye-Dörtyol (Payas)
- Dörtyol-Kırıkhan-Hassa Highway Route.

2.4.3 Project Route Alternatives

After Dörtyol-Kırıkhan-Hassa Highway Route is selected as the main route of the Project, the route modifications were made for the optimization of the route in case of following criteria:

- Fault crossings,
- Soil stability,
- Constructability,
- Proper slope and topography required for the construction of the railways,
- Distance to the natural habitats, archaeological sites and other cultural heritage,
- Connection need with the existing roads and railways and
- The least forestry land use and expropriation.

2.4.4 Technology Alternatives

Regarding tunnel construction, they will be excavated using TBM (Tunnel Boring Machine) and NATM (New Austrian Tunnelling Method) methods. While one of the road tunnels will be entirely TBM, the other one will be entirely NATM. The railway tunnel, on the other hand, will be excavated using a combination of TBM and NATM (one end will be excavated by using TBM and the other end will be excavated by using NATM).

For railway technology, the main options considered were electrified and diesel-powered trains. Key comparisons include:

- Diesel-powered trains transfer 30-35% of combustion energy to the wheels, while electric-powered trains transfer about 95% of energy directly from overhead power lines.
- Electric locomotive engines are about 20% cheaper to operate than diesel locomotive engines, and their maintenance costs are 25-35% lower than those of diesel engines.
- Diesel fuel prices are expected to increase in the long term.
- Electric-powered trains significantly reduce air pollution and greenhouse gases, particularly in urban areas, cutting GHG emissions by up to 20% compared to diesel-powered trains.

As a result, the railway will be a single-track conventional line operated by electric locomotives for freight trains, using existing TCDD electric trains. The Project does not include building new stations.

2.5 Land Use

The Project includes approximately 26 km motorway and 23.5 km railway and in total 16 Project units including 1 tunnel, 6 underpasses, 1 overpass, 3 Highway entrance and exit toll gates, two motorway interchanges and 5 culvers.

The existing land use of the AoI of the Project will be affected by the construction of the Project and its components. There will be loss of public and private lands since the Project execution will require partial or complete acquisition of land.

The Project execution will require permanent acquisition of land by using expropriation. As mentioned, the Project may have economic displacement and physical resettlement impact, however, at this stage, the magnitude of displacement is not completely known since the land acquisition files have not been prepared for the Project.

In total 81 parcels comprising 66 private parcels and 15 public lands, will be needed. Detailed breakdown of the affected parcel numbers by settlements is given in Table 2-12. Although the lands that will be affected by the Project have been identified, the expropriation process has not yet started.

Table 2-12: Numbers of Affected Parcels per Settlements

Province	District	Settlement	No. of affected parcels	No. of Private lands	No. of Public lands
Hatay	İskenderun	Karayılan	24	11	13
	Payas	Yakacık	2	-	2
		Çağlalık	2	-	2
	Kırıkhan	Bektaşlı	7	7	-
	Hassa	Deliçay	48	48	-
		Yuvalı	2	2	-
		Mazmanlı	1	-	1

2.6 Project Schedule

The Project will include infrastructure construction, above ground facility construction, electrification, signalling and telecommunication installations. Construction phase of the Project is planned to be started in first quarter of 2025 and to be completed till the end of 2030, while operation phase is planned as 25 years.

2.7 Project Phases

2.7.1 Construction Phase

The construction phase of the Project will include the following key activities:

- Land preparation and construction works
  - Clearing of vegetation
  - Removal and storage of topsoil
  - Levelling and grading of the surface
  - Tunnel construction, including blasting
  - Transportation of construction materials
  - Operation of temporary facilities such as camp sites, concrete batching plants, precast plants, and crushing/screening plants
  - Transporting excess excavated material to designated storage areas
  - Building engineering structures
  - Construction of above-ground facilities

- Electromechanical work, including electrification, signalization, and telecommunication for both the highway and railway.

Approximately 1,250 workers are expected to be employed during the construction phase.

2.7.2 Operation Phase

After the completion of the construction works, the Project will be commissioned. All Project structures and elements included in the EPC contract will be transferred from AYGM to MoTI. The Project will be operated by the TCDD and KGM. Client will not be involved in the operation phase of the Project.

Within this regard, operation phase of the Project is planned as 25 years.

The main emission source during the operation phase is exhaust emissions of the vehicles along the Motorway Route. In addition, the main sources of the noise and vibration emissions during operation phase of the Project will be train traffic and road traffic which will be cumulated throughout the road axis.

2.7.3 Decommissioning Phase

To date there is no information available regarding the expected lifetime of the Project and decommissioning is not warranted at an estimated time. Decommissioning of the tunnel, highway and the railroad are not anticipated in the foreseeable future.

3.0 MANAGEMENT OF ENVIRONMENTAL AND SOCIAL ISSUES

An ESIA must adhere to both national laws and international standards. The IFC Performance Standard 1 (IFC, 2012) outlines key objectives for an ESIA, which include:

- Identifying and evaluating social and environmental impacts, both positive and negative, within the project's area of influence.
- Applying the mitigation hierarchy, which prioritizes avoiding, minimizing, and mitigating negative impacts, and compensating where necessary, especially for impacts on workers, affected communities, and the environment.
- Conducting meaningful stakeholder consultation.
- Enhancing companies' social and environmental performance through the effective use of management systems.

As per IFC Performance Standard 1, the assessment typically covers:

- The potential environmental and social impacts throughout the entire project lifecycle, including preconstruction, construction, operation, and decommissioning phases.
- A plan for public consultation and information disclosure to ensure local communities and stakeholders are informed and can share their views.
- Proposed mitigation measures to minimize negative environmental impacts.
- The significance of residual impacts (those that remain after mitigation) and ongoing plans for monitoring and management.
- The evaluation of cumulative impacts.
- A social management plan aimed at maximizing benefits for the local community and promoting a sustainable economy.

The ESIA Report has been prepared by WSP for the following objectives:

- Identification and assessment of social and environmental impacts, both adverse and beneficial, in the Project's area of influence;
- Evaluation of the main environmental and social risks and potential impacts of the Project;
- Presentation of Environmental and Social Management Plan ("ESMP"), Stakeholder Engagement documentation, and grievance mechanism in line with the EP IV, and IFC PSs;
- Description of the management, mitigation, monitoring and compensation measures, including the Environmental and Social Management System ("ESMS"), the ESMP, and the thematic action or management plans;
- Cumulative impact assessment (as required by the EP IV and IFC PSs); and
- Assessment of associated facilities.

As a key step in the ESIA process; various studies have been conducted to collect information on the existing environmental and social baseline conditions. Apart from the desktop and relevant literature review, the following activities were performed (along the entire route including associated facilities) for the collection of information on environmental and social baseline conditions:

- Air quality measurements were conducted at selected locations along the representative surroundings of the Project route and associated facilities.
- Ambient noise and vibration measurements were conducted at selected locations along the representative surroundings of the Project route and associated facilities.
- Surface water and groundwater quality measurements were conducted at selected points along the Project route.
- Soil quality measurement activities were conducted at selected points along the Project route.
- Site visit was performed by the experts of WSP Türkiye for the identification of environmental components of the impact assessment study.
- Site visit was performed by biodiversity experts on behalf of WSP Türkiye for the identification of the biological components of the impact assessment study.
- Site visit was performed by WSP for mapping of the social baseline of the study area; the data is collected by WSP through community level surveys and household surveys. Qualitative and quantitative methods have been used during the baseline data gathering.
- Site visit performed by archaeological experts on behalf of WSP Türkiye for the assessment of the archaeological issues.

Summary of the Impacts and Mitigation&Monitoring Activities

Table 3-1: Summary of the Impacts and Mitigation&Monitoring Activities

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
Geology and Geomorphology			
The Project Area covers the road route between Dörtyol District in İskenderun Bay and Hassa District in the west. With this Project, the Amanos Mountains are crossed in the west-east direction. The units forming the geology are Zabuk Formation, Çaltepe Formation, Seydişehir Formation, Olucak Formation, Nurdağı Formation, İslahiye Formation, Karadut Formation, Kızlıdağ Ophiolite, Yavuzeli Basalt, Delihalil Basalt, Alluvial Fan and Alluvium.	Potential changes in the local morphology is expected during construction phase due the earthworks and excavations, and for the site preparation (scarified, excavated, filled with proper material, and flattened) and the construction of the structures' foundations. No impact is expected during operation phase. The impacts are expected to be at low level after taking necessary mitigation measures during activities.	■ Detailed studies on geological and geotechnical components will be completed for the Project before the construction phase, considering the shallowness of the current geotechnical boreholes. ■ Worksite will be minimized to the smallest extent possible in order to meet Project's works and activities. ■ Construction site will be minimized to the smallest extent possible in order to meet Project's works and activities. ■ The flattening and excavation operation will be minimized to the extent possible in order to limit the morphological disturbances. ■ Part of the removed material will be re-used as a fill material at the Project Area, if it presents the suitable geotechnical characteristics, in order to limit the use of raw material. ■ Several structures will be developed/revised as part of the changes in the Project, and these will all be designed according to Turkish and international design standards (requiring specific structural characteristics related to slopes of cuts and fills and many other considerations). ■ Soil and Topsoil Management Plan and Landscape Management Plan will be implemented for the Project to ensure that identified impacts and risks are managed. Excavated Material and Dump Site Management Plan has been developed and will be implemented for the management of the excavation materials in the dump sites.	No specific monitoring activities are required for this component.
Natural Hazards and Seismology			
There have been earthquakes of various magnitudes in the Project area from past to present. The Project area was severely damaged in the recent earthquake centered in Kahramanmaraş on February 6.	Seismic activity: The Project Area is within a seismically active area in accordance with the seismic zones map of Turkey. Karst Geohazard: Tunnel construction in karst areas can encounter caverns, which may lead to risks like water inrush and collapses during the construction process. Changes in the local morphology.	■ Before and during the construction activities of the Project, the provisions of "Türkiye Building Earthquake Regulation" (OG Number: 30364 Date: 18.03.2018) will be complied with. ■ Seismicity report has been prepared for the Project. Detailed investigations will be conducted for assessing the stability conditions for the structural elements for both normal operation loads and under seismic loads. Türkiye Building Earthquake Regulation requires certain parameters to be determined prior to the construction. These parameters were determined by the geological and geotechnical investigations of the Project Area. ■ Several structures will be developed as part of the proposed Project (culverts, overpasses etc) and these will all be designed according to Turkish and	■ Routine site inspections will be carried out by the Client in collaboration with Survey Department to ensure that the planned construction site boundaries are not expanded. ■ Routine design inspections will be carried in order to ensure structures are constructed according to Turkish and international design standards requiring specific structural characteristics related to tunnel excavation, blasting and many other considerations.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
		international design standards requiring specific structural characteristics related to slopes of cuts and fills, footing sizes and many other considerations. ■ Related studies (geological, geotechnical, hydrological studies, hydrogeological karst surveys, geophysical surveys etc.) will be completed for the Project before the construction phase in order to understand the karst in the Project Route, geological and hydrogeological setting causing geohazards such as collapse of loose filling, groundwater inrush, subsidence and to apply engineering measures such as pre-grouting, jet-grouting, probe drilling, dewatering, drainage piping etc.	
Soil and Sub-soil			
10 soil samples were taken from different sampling points within the Project area to identify the baseline conditions. The erosion risk at the beginning of the tunnel in Dörtyol District is in the very light erosion category, tunnel exit area in Hassa District is in the very severe erosion category.	**During the construction phase** ■ Topsoil and lower soil removal, ■ Pollutant Emissions to Soil: The impact of spills and runoff during construction on soil can vary from minor to severe, depending on contamination levels as defined by the Turkish Regulation on Soil Pollution Control and Point Source Contaminated Sites. ■ Contaminated Land: Due to the dominance of agricultural and forestry land along the Project route, the likelihood of encountering historical soil contamination in remote and unpopulated areas is considered low, based on baseline soil quality measurements. ■ The occupation of land, ■ Discharge of wastewater. Impacts are expected to be at low and negligible level with the realization of proposed mitigation measures. ***During the operation phase*** ■ Occupation of land	■ An Emergency Response Plan (ERP) will be developed in line with Environmental, Health, and Safety (EHS) Guidelines: General EHS guidelines (IFC, 2007) for handling spills of hazardous materials including fuels that will be handled during construction works. ■ Safe Fuelling and Gasoline Handling Guidelines will be developed in the construction areas. No fuelling of vehicles or equipment will take place within excavated areas, if practically feasible. If heavy equipment cannot be moved to appropriate fuelling points, an impervious surface (such as a drip-tray) has to be used for refuelling this equipment to hinder accidental spillage to drain into the soil and therefore in potential groundwater aquifers. ■ The areas, where the hazardous materials (chemicals, liquids etc.) storage tanks located (i.e., hazardous material storage areas), will be designed and constructed to avoid potential contamination into the soil (paved areas with sufficient secondary containment, proper drainage systems, storage as per Safety Data Sheet (SDS) requirements etc.). Also, the Project will comply with relevant legal and Project safety requirements to avoid leakages from hazardous materials (chemicals, liquids etc.) storage facilities on-site. ■ Vegetation covering the topsoil, can cause difficulty in the removal of specific topsoil depths and excessive quantities of vegetative matter in stockpiles may promote chemical and biological degradation of the seed reserves that will be the future source of natural regeneration during rehabilitation process. Therefore, prior to topsoil stripping process, vegetation will be removed. ■ Industrial Waste Management Plans for all temporary waste storage area established by contractors (including hazardous and non-hazardous waste) will be submitted to the relevant Provincial Directorate of MoEUCC as per the format defined by the MoEUCC. Moreover, Excavated Material and Dump Site Management Plan has been developed and will be implemented for the management of the excavation materials in the dump sites. ■ Project-specific Pollution Prevention Plan will be implemented for the management of sewage wastewater and implemented during the construction phase of the Project. Additional mitigation measures are given in the Soil and Erosion Management Plan.	■ Routine site inspections will be carried out and reported to identify any possible leakages; ■ Regular site inspections will be carried out to ensure that the planned construction site boundaries are not expanded; ■ Training on ERP on spill response, use of containment and clean-up material for the workers (including the subcontractors' workers) will be recorded; ■ Review of ERP implementation requirements ensure adequate amount of spill-response material such as spill-kits and metal trays will be present at the site and in each heavy machinery and records will be kept; ■ Routine maintenance programme will be set-up and maintenance records will be kept for all vehicles and machinery/equipment.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
	Impacts are expected to be at medium level with the realization of proposed mitigation measures.		
Hydrology and Surface Water Quality			
To assess the surface water quality, a comprehensive hydrocensus was conducted and 6 surface water location were sampled for determination of baseline surface water quality.	**During the construction phase** ■ Changes in flow/circulation in natural water bodies (changes in local hydrology and surface water), ■ Surface water pollution, and ■ Discharge of wastewater/water. **During the operation phase** ■ Changes in surface run-off patterns. Impacts are expected to be at low and negligible level with the realization of proposed mitigation measures.	■ A Flood Risk Management Plan will be prepared by the Client and implemented to mitigate the adverse effects of flooding. ■ The General Directorate of State Hydraulic Works (DSİ), General Directorate of Water Management (GDWM) and General Directorate of Infrastructure Investments (AYGM) will be consulted regarding hydrological studies and surface water quality and any additional studies (if needed) will be conducted prior to the construction phase based on the opinions of these institutions. ■ Hazardous materials will not be stored in excavated areas and all handling of all hazardous materials will be in accordance with the Hazardous Material Management Plan which will be developed for the Project. This plan will be in line with IFC EHS Guidelines. As an example, secondary containment structures will consist of berms, dikes, or walls capable of containing the larger 110 percent of the largest tank or 25 percent of the combined tank volumes in areas where hazardous materials are handled (e.g., fuel stores and loading areas, concrete mixing, hazardous material stores) to prevent hazardous materials entering the site drainage. ■ An Emergency Response Plan (ERP) will be developed in line with IFC EHS Guideline for handling spills of hazardous materials including fuels that will be handled during construction works. ■ Pollution Prevention Plan will be prepared and implemented for the Project. ■ Water and Wastewater Management Plan will be developed and implemented for the Project. ■ Treated domestic wastewater may be reused for local vegetation watering, dust control, or as a fire-fighting reserve, in accordance with the standards outlined in the Wastewater Treatment Plants Technical Procedures Communiqué, if deemed feasible. If the decision is made to implement wastewater reuse, a detailed reuse plan will be developed during the construction phase. This plan will specify which types of wastewater are suitable for each reuse application and include effective control measures to prevent the misuse of reused water. Additional mitigation measures are given in the Resource Efficiency Management Plan.	The surface water quality monitoring program will be based on site-specific risk assessments and regulatory guidelines. Key points include: ■ Monitoring of surface water quality and quantity will occur seasonally during construction, using baseline data to detect pollution and analyze trends. ■ Surface water flow rates will be monitored, and an accredited laboratory will manage sampling. ■ Flooding conditions and runoff after heavy rainfall will be assessed to check water conveyance systems. ■ Routine inspections will ensure the functionality of measures like spill response materials and concrete pavements. ■ Training on spill response and clean-up for workers will be documented. ■ Water quality and sedimentation will continue to be monitored during construction and, if needed, during operation.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
Hydrogeology and Groundwater Quality			
The Project component is the Asi River Basin. Limestones near the Project Route are karstic limestones. The most significant example of the karstification of limestones is Damlataş Cave, which is 11 km to Payas and 21 km to Dörtyol. To assess the groundwater quality, a comprehensive hydrocensus was conducted along with the surface waters and 6 groundwater locations were sampled for determination of baseline groundwater quality.	**During the construction phase** ■ Changes in the local hydrogeology, and ■ Groundwater pollution. **During the operation phase** ■ Changes in the local hydrogeology Impacts are expected to be at low and negligible level with the realization of proposed mitigation measures.	■ Measures incorporated in the Project Design: ▪ The General Directorate of State Hydraulic Works (DSİ), General Directorate of Water Management (SYGM) and General Directorate of Infrastructure Investments (AYGM) will be consulted regarding hydrogeological studies and groundwater quality and any additional studies (if needed) will be conducted upon their opinions prior to the construction phase. Hydrogeology will be assessed at sites where aquifers may be directly affected or exposed, including tunnel mirrors. ▪ Before the construction of the tunnel, the groundwater inflow rate will be evaluated by performing a hydrogeological survey. For this purpose, groundwater level measurements and groundwater level distribution of water-bearing geological units in the groundwater basin where the tunnel route is located are required. If the groundwater level is above the tunnel elevation, the groundwater inflow should be calculated by analytical or numerical models. In order to make this calculation, aquifer parameters will be needed by drilling and instrumenting boreholes and performing aquifer tests (pumping tests, Lugeon tests, permeability tests) as well as water budget calculation. Additionally, the presence and impact of the karst will be the subject of these calculations. Dewatering plan can be designed according to the groundwater inflow rate. ▪ In case groundwater is encountered during the construction, groundwater will be abstracted from the work area by dewatering studies. Treatment, storage and disposal should be done according to regulatory requirements after performing the necessary analyses and obtaining relevant permits. ▪ The use of groundwater resources will be subject to DSİ approval. DSİ will allow the drilling and use of wells for water supply in case the groundwater resource is adequate. Such approvals are based on the availability of water supply. ▪ A Groundwater Monitoring and Management Plan will be prepared and implemented, and the impact factor of groundwater depletion will be assessed before any decisions are made regarding water supply. General mitigation measures: ■ No fuelling of vehicles or equipment will take place within excavated areas. If heavy equipment cannot be moved to appropriate fuelling points, an impervious surface (such as a drip-tray) will be used for refuelling this equipment to prevent accidental releases to groundwater aquifers. ■ Hazardous materials will not be stored in excavated areas and all handling of all hazardous materials will be in accordance with the Hazardous Material Management Plan which will be developed for the Project.	■ The monitoring of the groundwater resources will be based on guideline to be developed following the hydrogeological investigations. The guideline will be based on the Guidance on Groundwater Monitoring, Common Implementation Strategy for the Water Framework Directive (2000/60/EC) and will include the following items: ▪ Identification of existing extraction wells (irrigation, domestic and public use) within the zone of influence, ▪ Periodic monitoring of groundwater quantity and quality during the construction period, ▪ Periodic monitoring of groundwater discharge locations (stream or lake monitoring) and the operation period, ▪ Periodic monitoring of groundwater levels to assess seasonal variability. ■ Groundwater monitoring in terms of both quality and quantity will continue at the groundwater monitoring locations given in Section 6.1.7 of the ESIA report during the construction and operation phases. In the case of the monitoring program's extension, the aquifers and groundwater bodies defined within the same studies will be considered. Groundwater monitoring will be seasonal. Using monitoring data, trends will be analysed. The data should be reviewed periodically (at least on an annual basis) by the Client and/or an independent supervisor to establish current site conditions and to detect any trends in groundwater quality or levels. If significant trends are observed, then potential causes should be investigated, and corrective measures should be taken, as necessary. ■ During monitoring, the groundwater levels will be monitored continuously by either manual dip meters or internal transmitters and the monitoring and sampling operations at the monitoring wells based on the EIA commitments will be conducted by an independent company or an accredited laboratory by the MoEUCC in Türkiye. ■ Design checks, to ensure the measures listed above are in place (like concrete pavement in storage areas,

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
		■ An Emergency Response Plan (ERP) will be developed in line with IFC EHS Guideline for handling spills of hazardous materials including fuels that will be handled during construction works. ■ Pollution Prevention Plan will be prepared and implemented for the Project. ■ Water and Wastewater Management Plan will be developed and implemented for the Project. ■ The specific items in the management plans will address the measures below related to groundwater and protection: ▪ Preventing the discharge of untreated wastewater, residues or other waste into groundwater or surface water. ▪ Controlling and avoiding wastewater flows from any field activities (i.e., blasting, drilling, re-fuelling and vehicle/equipment washing). ▪ Collecting and managing contaminated water (if any generated as a result of accidental leakages) in order to prevent mixing with any water body and topsoil/soil pollution. ▪ Assuring the maintenance of vehicles and equipment (if necessary) in designated areas with impermeable surfaces (concrete floors, etc.) and if necessary, secondary containment systems. ▪ Making portable spill containment and clean-up materials (spill kits) available and easily accessible at the construction site, including instructions on how to use spill containment and clean-up materials. ▪ Training workers (including subcontractor workers) on spill response, use of containment and clean-up materials (spill kits). ▪ Providing adequate and properly maintained tanks, paved ground, spill containment materials and proper secondary containment systems with sufficient volume for fuel/oil storage and for the storage of other fluids and hazardous substances to prevent loss to the soil.	collection pond underneath etc.) and, will be undertaken. ■ The provided training on spill response, use of containment and clean-up material for the workers (including the subcontractors' workers) will be recorded. ■ Routine site inspections will be carried out to ensure an adequate amount of spill-response material such as spill-kits and metal trays will be present at the site and in each heavy machinery and records will be kept. ■ A routine maintenance programme will be set up and maintenance records will be kept for all vehicles and machinery/equipment. ■ By using appropriate sealing mechanisms (enclosed conveyance of the extracted groundwater to settlement structures), potential chemicals will not come into contact with the dewatered groundwater, if the dewatering will be necessary. Discharges will be periodically tested to meet Turkish and international standards (e.g. IFC General EHS Guidelines, EU standards).
Air Quality			
Air quality measurement studies for PM_{10}, $PM_{2.5}$, NO_2, SO_2 and settled dust parameters were conducted at 10 representative locations/sensitive receptors along the planned Project Route (mostly the closest sensitive receptor to the route) and close to the Project facilities according to national and international limit values/standards.	Construction activities may generate emission of fugitive dust caused by a combination of cut excavation/ backfilling activities on the Project Route. Gaseous emissions are originated from the exhaust emissions due to fuel combustion in operation of the heavy-duty vehicles during construction and operation phases. The modelling results were also assessed cumulatively by using recent air quality data measured at	The following actions are recommended to reduce the dust generation in the construction areas: ■ Use of water suppression at construction sites and transportation routes, especially in hot-dry seasons, ■ Loads in all trucks transporting dust-generating materials will be sprayed with water to suppress dust, ■ Use of water suppression for control of loose materials on paved or unpaved road surfaces, ■ Use of dust suppression techniques, such as covers, water suppression, or increased moisture content for open materials storage piles, ■ Speed reduction for the means travelling inside the construction site.	Monitoring campaign is recommended be conducted at the baseline measurement locations close to the active construction sites and active associated facilities in order to observe the dust emissions during the construction activities and the results will be compared with the Project Standards. Monitoring of air quality at least one period is recommended prior to initiation of construction works in order to enhance baseline data.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
	the closest sensitive locations within the impact area of the Project. As a result of the studies, negligible level of degradation in air quality is expected with the implementation of necessary mitigation measures.	In order to reduce the air emissions from construction vehicles, the following actions shall be implemented: ■ Activities will be conducted trying to use the minimum required number of means at the same time, ■ Vehicle engines and other machinery shall be kept turned on only if necessary, avoiding any unnecessary emission, ■ All equipment and machinery must be maintained for compliance with standards and technical regulations for the protection of the environment and have appropriate certification, ■ Machinery and equipment shall be periodically checked and maintained to ensure their good working condition, ■ Monthly monitoring campaign will be conducted during the construction phase at baseline locations close to the active construction sites and active associated facilities. Additional mitigation measures are given in the Pollution Prevention Management Plan.	Exhaust emissions from construction and transportation vehicles should be periodically monitored along with the requirements in the Regulation on Control of Exhaust Gas Emission both in construction and operation period of the Project.
Greenhouse Gas Emissions			
According to Türkiye's National Inventory Report submitted to the United Nations Framework Convention on Climate Change (UNFCCC), Türkiye-wide GHG emissions for the year 2021 is 517.2 megatonnes CO_2e/year.	Contribution to climate change by causing greenhouse gas emissions to be resulted from fossil-fuel combustion, electricity consumption and blasting during construction phase, and electricity consumption during operation phase. The combined annual emissions from the construction phase of the Project are estimated about 74,194.7 t CO_2e per annum. This annual value surpasses the 25,000 t CO_2e threshold defined in IFC PS3 and Equator Principles IV which requires annual monitoring and reporting. The combined annual emissions from the operation phase of the Project are about 629.4 t CO_2e per annum. The contribution of the proposed Project to the GHG emissions is expected to be at low level during construction phase and negligible during operation phase.	■ The Best Available Techniques should be taken into consideration in Project design as much as possible. The applicability of the Best Available Techniques (BATs) developed within the European regulatory framework [i.e., Integrated Pollution Prevention and Control, "IPPC", BAT Reference Documents (BREFs) according to the European Directive 2010/75/EU (IED)] should be evaluated and integrated into the Project design. ■ All employees will be provided climate, resource and energy efficiency awareness training. ■ The most efficient equipment in terms of fuel usage and effective operation will be chosen. Maintenance of all machinery and equipment will be periodically conducted to ensure efficient fuel use and effective operation as well. ■ Efficient resource and material use will be promoted through the development and implementation of a management plans to reduce direct and indirect GHG emissions due to the Project. Other aspects of resource efficiency regarding water usage are covered in Project Description and related impact assessment section. ■ No idling and out-of-scope operation of the machinery and equipment will be allowed. ■ Apart from the Project footprint, vegetation cover will not be disturbed. ■ Project design will be reviewed in a way that will reduce the Project footprint as much as possible. ■ Blasting patterns will be reviewed in a way that will reduce the amounts of explosives to be used. ■ In order to reduce the GHG emissions resulting from waste disposal processes, amount of wastes generated as a result of project actions will be minimized and generated wastes will be recycled accordingly.	GHG emission levels (combined Scope 1 and Scope 2 Emissions, and, if appropriate, the GHG efficiency ratio) from the facilities owned or controlled within the physical project boundary, as well as indirect emissions associated with the off-site production of energy used by the Project will be quantified and reported publicly on annual basis during the construction phase.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
		■ During the closure phase, rehabilitation of land will help to recover lost carbon sink by converting the disturbed land to its original state as much as possible, which will act as a long-term mitigation measure. ■ Green Energy Certificate which indicates that a certain amount or entire electricity used by the Project comes from renewable energy sources, should be obtained in order to induce a decrease in Scope 2 related GHG emissions which is linked to the construction and operation phases of the Project.	
Climate Change Physical Risk Asessment (CCRA)			
A CCRA Study has been conducted that show the degree to which the Project region is vulnerable to the physical risks (acute and chronic) of climate change and the potential consequences.	**Acute physical climate risks** can include increased severity and frequency of droughts, storms, floods, and wildfires. **Chronic physical climate risks** can include sea level rise and longer-term temperature increase. Climate-related physical risks may include a variety of effects: ■ Direct damage to assets, as a result of extreme weather events (i.e., drought, storms) or rising sea levels. ■ Changes in water availability, sourcing and quality, often with consequent social impacts. ■ Disruption to operations, ability to transport goods and supplies and impacts on employee/community safety, and more.	A list of potential adaptation measures was suggested that applies to all hazards to further prevent the related risks, to reduce the potential impacts towards all different Project elements and to increase the general awareness of climate-related risks. These are listed below: **<u>Severe storms and extreme precipitations:</u>** ■ **Monitoring Systems**: Implement real-time precipitation and wind monitoring systems to detect and respond to extreme storms and precipitations conditions promptly. Automated systems can trigger water pumps in the drainage system when the precipitation exceed certain thresholds. ■ **Wind Barriers**: Install wind barriers or deflectors around the tunnel entrances and exits to reduce the impact of strong winds. These can help in diverting wind flow and minimizing direct exposure. ■ **Vegetation and Landscaping**: Use vegetation and landscaping strategically around the tunnel site to act as natural barriers against wind and water. Trees and shrubs can help in reducing wind speed and managing surface water runoff. ■ **Flood Barriers:** Implement flood barriers at tunnel entrances and exits to prevent water from entering the tunnel during extreme rainfall events. These barriers can be automated to deploy when needed. ■ **Real-Time Monitoring:** Implement real-time weather monitoring systems to detect hailstorms and provide early warnings. This allows for timely activation of protective measures. ■ **Structural Flexibility**: Design the tunnel with flexible joints and shock absorbers to absorb and dissipate the energy from strong winds and heavy rainfall, reducing the stress on the structure. **<u>Drought and Extreme Heat:</u>** ■ **Green Infrastructure**: Incorporate green infrastructure, such as green roofs or walls at tunnel entrances and exits, to reduce the heat island effect and provide natural cooling. ■ **Monitoring Systems**: Implement real-time temperature monitoring systems to detect and respond to extreme heat conditions promptly. Automated systems can trigger cooling mechanisms when temperatures exceed certain thresholds.	■ **Monitoring Systems for severe storms and extreme precipitation**: Implement real-time precipitation and wind monitoring systems to detect and respond to extreme storms and precipitations conditions promptly. Automated systems can trigger water pumps in the drainage system when the precipitation exceed certain thresholds. ■ **Monitoring Systems for drought and extreme heat**: Implement real-time temperature monitoring systems to detect and respond to extreme heat conditions promptly. Automated systems can trigger cooling mechanisms when temperatures exceed certain thresholds.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
		■ **Alternative Water Sources:** Identify and utilize alternative water sources, such as rainwater harvesting and greywater systems, to reduce dependence on local water supplies. ■ **Vegetation Management:** Implement vegetation management practices around the tunnel site to reduce the amount of flammable material. This includes regular clearing of dry brush and maintaining a defensible space around the infrastructure. ■ **Firebreaks:** Create firebreaks around the tunnel site to slow down or stop the spread of wildfires. These are gaps in vegetation that act as barriers to fire. ■ **Green Infrastructure:** Incorporate green infrastructure, such as green roofs or permeable pavements, around the tunnel site to manage stormwater naturally and reduce runoff. **Overall recommendations:** ■ The Emergency Plan should be expanded to include procedures and measures to deal with climate hazards. The Plan should be regularly updated. ■ An efficient network connectivity within the Project site should be maintained, making sure mobile communication and alternative communication systems would be available in case of an emergency due to climate-related extreme events. ■ The roads connecting to the Project facilities are maintained on a regular basis. This would increase the Adaptive Capacity in all hazards.. ■ Stay informed about the evolution of climatic conditions at the national and regional levels and about the policies and plans established by the Turkish government to deal with climate change.	
Noise and Vibration			
Baseline noise and vibration measurements were conducted at 10 locations. The measurement results are below the limit values defined by IFC and Turkish Legislation. These baseline measurements were conducted at the Project Local Study Area without any activities before construction. The vibration measurement results at all receptors are below the associated limit.	Potential impacts of noise during the construction phase of the Project will mainly originated from the operations of heavy equipment/machines that will be used in the infrastructure and superstructure construction. In terms of vibration, potential impacts are foreseen due to the blasting activities to be carried out at tunnel entries/exits. For the operation phase, noise and vibration generation is expected due to the operation of trains.	The construction and operation phase noise emissions were assessed by noise modelling studies. The modelling results were also assessed cumulatively by using the recent baseline noise measurement results. Based on the modelling studies following actions are recommended to reduce the noise emissions: ■ Limiting the hours of operation for specific pieces of equipment or operations, especially mobile sources operating through community areas, ■ Reducing Project traffic routing through community areas wherever possible, ■ Carrying out the regular maintenance of the construction equipment in order to minimize the possible high noise levels generated by the equipment, ■ During the construction phase, in case of any noise related grievance, noise measurement campaign will be carried out immediately at the area where noise related grievance is received. If monitoring results indicate that noise levels are above the defined limits, noise barriers will be installed ■ During the operation phase, in case of any noise related grievance, noise measurement campaign will be carried out immediately at the area where noise related grievance is received. In cases when monitoring results indicate that noise levels are above the defined limits, then noise abatement measures will be implemented.	■ A monitoring programme of noise at the baseline locations and receptors exceeding the limit values during construction and operation phases will be in place. The monitoring campaign will be conducted by 48 hours continuous measurements at the locations. ■ Noise levels will also be monitored at the receptors where the defined noise limit values are exceeded, at least for a year on monthly basis during the operation phase of the Project. ■ During the blasting activities, vibration measurement studies will be performed for frequency ranges on the closest receptors to the blasting locations. ■ Surveys of existing building structure and integrity at receptors close to the blasting sites will be undertaken both prior to any blasting activity and monthly during the construction phase, ■ During the construction and operation phases of the Project, in case of any vibration related grievance,

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
	As a result of the modelling and assessment studies, low increase in noise level and vibration level is expected with the implementation of necessary mitigation measures.	The construction and operation phase vibration impacts were assessed by vibration calculations. Based on the calculations following actions are recommended to reduce the vibration impacts: ■ It should be noted that, tunnel opening drilling works should comply with the Turkish regulatory limit values of 10 mm/s and 5 mm/s for residential areas and cultural heritage areas, respectively. On the other hand, blasting activities should comply with the Turkish regulatory limit values of 5 mm/s and 2 mm/s for residential areas and cultural heritage areas, respectively. ■ Proper and timely communication and information exchange between the Client/Contractor and residents, are essential to prevent unnecessary concerns. Therefore, residents will be informed about the proposed blasting times and/or any deviation from this programme. ■ Construction and blasting activities will be scheduled to minimise potential vibration related impacts. ■ During the drilling and blasting activities, vibration measurement studies will be performed for frequency ranges on the closest receptors to the blasting locations. Within this regard, the nearest receptors to the drilling and blasting locations will be identified at the site prior to the drilling and blasting activities. ■ Baseline surveys of existing building structure and integrity at receptors close to the drilling and blasting sites will be undertaken so that impacts and any damage arising from drilling and blasting activities will be identified during the periodic monitoring studies. Additional noise and vibration mitigation measures are given in the Pollution Prevention Management Plan.	vibration measurement campaign will be carried out immediately at the area where vibration related grievance is received.
Traffic and Infrastructure			
The Project Area is approximately 55 km away from Hatay City Center and 13 km away from Dörtyol district by road. The Project is planned to connect the O-53 Çukurova Highway with the D-825 Hassa state road. The access roads to be used within the scope of the Project, already exist. Therefore, additional road construction is not expected but some extension or rehabilitation works might be performed in case of need. The land traffic in the construction phase will be generated by the machinery, equipment, material and staff to be transported to the Project construction sites. During the construction phase an increase especially of trucks is expected.	During the construction phase, movement of trucks entering and leaving the Project area for the transportation of machinery, equipment, construction material (e.g., concrete, building materials) and staff are expected to affect the existing traffic load of the Project area. With the mitigation measures defined in the ESIA, increase in road traffic is expected to be at low level during construction period. During the operation phase impacts will be mainly associated to the impact factor of decreased traffic load in lower standard roads. After constructing the highway and railway, part of the traffic will stay on the existing roads and other part will be on the new highway sections and use of heavy vehicle will decrease because of the use of freight trains for supply chain of the industries around the Project Route.	■ Consideration will be given to traffic volumes at the rush hours of the day and delivery of equipment and materials will be utilised at quieter periods to avoid increased congestion on the roads used by the nearby communities. ■ In case of any damage on the roads resulting from the Project activities, necessary maintenance works will be undertaken. ■ Journey Management System will be implemented including a route survey to clarify the transportation route of the equipment/material prior to transportation. ■ Changes of the condition of the roads will be monitored regularly and necessary road correction remediation actions will be taken where necessary. ■ An external grievance mechanism will be established for the affected communities to express their concerns about the traffic management. ■ Project disclosure activities will include informing communities about the Project traffic management controls and grievance mechanism. Collaboration with local communities and responsible authorities will be ensured to improve signage, visibility, road safety conditions especially near the roads and other locations where children may be present. ■ Appropriate traffic signs, signals, lights and markings will be placed at the required areas to prevent potential accidents/incidents. Barriers will be placed at the required areas to protect both human and assets. ■ Within the scope of the Project, Intelligent Traffic System (ITS) will be built. Through the ITS, real-time signage warning systems will be used to warn drivers	■ Investigation of the incidents and accidents and use of lesson's learned to improve traffic mitigations. ■ Following of the licenses and medical surveillance of the operators to ensure that it is up to date. ■ Monitoring condition of the roads to ensure safe driving. ■ Controlling maintenance records of the vehicles to ensure regular maintenance activities take place. ■ Weather forecast monitoring to ensure safety of the operators. ■ Closely monitoring the compliance with speed limits to protect the health and safety of both public and employees. ■ Following the comments and/or complaints received via grievance mechanism to improve traffic mitigations and to prevent air quality, noise and vibration impacts, if any.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
	When the Project is operational, it is expected to have positive impacts on the traffic of the region.	of traffic congestion, accidents, adverse weather conditions and other potential hazards. Additional mitigation measures are given in the Traffic Management Plan.	
Visual			
The Project area and its surroundings are consisting of agricultural lands and village settlements. There are six neighbourhoods within 2 km of Project route, namely Balarmudu, Delicay, Bektaslı, Dedecınar, Karayılan and Azganlık Neighbourhoods. Moreover, the Project comprises five dump site areas located in three neighbourhoods namely Konaklı, Caglalık and Buhara Neighbourhoods. There will be three mobilization areas in the scope of the Project, where two of them (e.g. Mobilization Area-1.1 and Mobilization-1.2) are in Karayılan Neighborhood while the other one (e.g. Mobilization Area-2) is in Balarmudu Neighbourhood. When landscape in/around the Project area is considered, it is seen that first 0-4 km part of the Project route consisted of industrial and urban areas, while 4-21 km part of the Project route consisted of rural areas. From km 21 to the end of the Project route, there are settlements and agricultural lands for the use of mainly olive oil production. In order to determine baseline visual view of the visual receptors, 10 viewpoint is selected.	Visual impacts could be arising from emission of dust, emission of light, vegetation cleaning and introduction of buildings/infrastructures. With the mitigation measures defined, the impact is expected to be at negligible level during construction phase and medium level due to introduction of permanent buildings/infrastructures during operation phase.	■ At the end of the construction phase restoration/rehabilitation activities will be conducted on all temporary facilities, therefore the only direct impacts remaining will be those due to presence of permanent buildings/infrastructures. ■ During the construction phase, restricted hours of working will be proposed especially for built up areas. Using machinery during those hours should be avoided in residential properties. ■ The housekeeping of the entire Project Route will be given importance throughout the life of the Project. ■ To minimize light spillage from the site, every effort should be made to minimize the number of lights consistent with health and safety standards. In a similar way, all lights should be shielded and as much as possible pointed to the ground to avoid direct light effects on sensitive receptors around the Project Route. ■ The lightings that will be used during the construction of the Project will be removed during the operation phase. ■ Regular monitoring of the affected people's grievances with regard to visual impacts. For this, the external grievance mechanism should be implemented properly, and all stakeholders should have access to this mechanism. Additional mitigation measures are given in the Landscape Management Plan.	Monitoring visual impacts involves observing how the community and stakeholders are affected. Any concerns raised will be documented and addressed through the Grievance Mechanism outlined in the Project's Stakeholder Engagement Plan, consistently throughout construction and operation phases. The Client will oversee regular checks on the visual and aesthetic state of Project facilities. These checks will occur during construction and operation phases with qualified personnel for evaluating aesthetic standards and taking necessary actions in coordination with contractors or upper management as necessary.
Wastewater Management			
Wastewaters will be generated at the construction sites and camps sites due to water consumption of the personnel. No wastewater generation is expected as a result from dust suppression activities, since the water to be used for dust suppression activities is expected to evaporate. No wastewater generation is expected during the concrete production process as the settled wastewater is recirculated to concrete production process. Water demand per capita is estimated as 229 L/person day based on 2022 data of TUIK (Turkish Statistical Institute) Municipal Water Statistics. It is assumed that all the domestic water to be used by the Project personnel will be converted to domestic wastewater. As such, the wastewater generation per day during the construction period is calculated as 160m³/day and 125.95 m³/day for Camp Site 1 and Camp Site 2, respectively. Domestic wastewater generated by personnel at the camp site will be collected by sewage infrastructure and treated in package wastewater treatment plant located at each campsite. The wastewater will be treated in accordance with the Project Standards defined in Appendix-A. Necessary permissions including design approval, discharge approvals, discharge point will be obtained from Hatay Provincial Directorate of Environment, Urbanization and Climate Change (PDoEUCC). There will be an open channel diversion system around the perimeter of the campsite to prevent surface water run-off entering the campsite and a separate open channel system to collect surface water run-off within the campsite. This system will be connected to an oil/water separator and sediment trap before being discharged into the environment. ■ Wastewaters will be generated at the construction sites and camps sites due to water consumption of the personnel. No wastewater generation is expected as a result from dust suppression activities, since the water to be used for dust suppression activities is expected to evaporate. ■ In terms of main camp sites, package wastewater treatment plant (WWTP) with domestic wastewater collection system will be established at each main camp site. For the subcontractor camp sites, generated domestic wastewaters will be collected in portable leak-proof quality septic tanks and wastewaters then will be disposed to the main camp site package WWTPs. ■ No untreated wastewater discharges of any type to land will be allowed. Polluted water (if any generated as a result of accidental leakages) will be properly collected or managed to prevent the soil pollution. ■ No wastewater generation is expected during the concrete production process as the settled wastewater is recirculated to concrete production process.		

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
■ For the associated facilities and construction sites along the route, leak-proof quality septic tanks will be provided for the collection of the generated domestic wastewaters. Collected wastewaters will either be collected by vacuum trucks and disposed of to the nearest licensed WWTP as per the agreements/protocols to be executed with the related municipalities/licensed companies or to the main camp site package WWTPs. ■ Vehicle washing activities may generate industrial wastewater at the campsites. This wastewater will either be directed to a blind shaft, from which it will be collected by vacuum trucks for disposal, or pre-treatment options will be considered before discharge into receiving bodies. Mitigation measures for wastewater management are given in Pollution Prevention Plan.			
Waste Management			
Construction ■ During all phases of the Project, domestic solid waste generation is expected from the daily activities of personnel and passengers. ■ During the construction of the Project, domestic solid waste generation is expected from the daily activities of personnel. During the construction phase, maximum number of employees planned to be employed are 1,250 workers. Assuming that average daily domestic solid waste per capita is 1.29 kg/person/day[1], the amount of daily expected solid waste production during construction phase will be *1.61* ton/day. *(Please see ESIA Report for the detailed calculations)* ■ Domestic wastes (inert domestic wastes and biodegradable domestic wastes) will be collected in special trash bins and temporarily stored onsite in compliance with Regulation on Waste Management and Regulation on Zero Waste. ■ Excavated Material and Dump Site Management Plan has been developed and will be implemented for the management of the excavation materials in the dump sites. Mitigation measures for waste management are given in Waste Management Plan.			
Biodiversity Components			
Field studies on the terrestrial flora and habitats were carried out at 18 different sampling points within the LSA along the Hatay Dörtyol-Hassa Highway and Railway Tunnel route on the 21st and the 22nd of July 2024. Sampling points were chosen to represent various environmental conditions in order to thoroughly understand the habitats and flora species in the LSA and to identify critical habitats or species of conservation concern. Field studies for freshwater fauna were conducted on the 13th of August. A total of 16 different locations were investigated during the field study. The natural habitats present in the LSA (55%) mostly consist of thermophilous deciduous forests and Mediterranean pine forests. The great majority of these habitats are limited to the tunnel route, where no habitat loss will occur. Flora species in the sparsely or unvegetated mineral substrate habitat (20%) in the region are generally drought adapted species. Based on the literature review and fieldwork conducted, 70 flora species were identified as present in the LSA. As a result of the evaluations, no threatened or endemic flora species were identified. The fauna species observed or potentially present within the LSA include 317 vertebrate species of which 9 amphibian, 26 reptiles, 61 mammals, 199 birds, and 22 fishes.	Impacts on biodiversity during construction phase is expected due to: 1) vegetation and topsoil removal. 2) changes in local hydrology and water quality. 3) increase in vehicular traffic. 4) emission of pollutants, dust and particulate matter 5) emission of light. 6) emission of noise and vibrations. 7) introduction and spreading of alien species. Impacts on biodiversity during operation phase is expected due to: 1) presence of new buildings/infrastructures. 2) changes in local hydrology and water quality.	The mitigation measures listed below follow the mitigation hierarchy and are proposed for the construction phase for the entire area that will be disturbed by the Project: ■ **Avoidance** Avoidance measures have been considered particularly during the design of the facilities and include: ▪ construction of permanent facilities in areas comprising modified habitats; ▪ planning of a considerable section of the route as a tunnel in order to limit habitat fragmentation or loss; ▪ utilisation of already operational quarries as a source of supply, with no increase in capacity in these areas as a consequence of the Project; ▪ minimisation of facility footprints. ■ **Minimization** 1) vegetation and topsoil removal: ▪ limits of clearing and construction areas will be clearly signed or fenced. ▪ in order to minimize direct impact on fauna, biological surveys (pre-construction surveys) will be implemented before vegetation clearance to identify and relocate fauna species and mitigation measures will be implemented; ▪ tortoise passage tunnels will be constructed at suitable points along the railway line. ▪ before construction, monitoring surveys will be conducted between March and August to monitor migratory birds along the highway and railway line, focusing	■ Indirect and direct inadvertent impacts on natural habitats and river crossing present around the construction site will be monitored monthly in order to assess eventual footprint creep outside designated areas, signs of erosion or stagnant water accumulation, functioning of culverts/channels for fish passages, presence of waste or hazardous substances spill; ■ Accidents involving wildlife or the observation of live animal or carcasses along the access road or on the construction site will be recorded. Additional mitigation measures to discourage wildlife presence on site and avoid roadkill will be taken if needed; ■ Presence of target species individual will be monitored; ■ Before construction, monitoring surveys will be conducted between March and August to monitor migratory birds along the highway and railway line, focusing on target species (globally EN, CR and VU species) and large-winged gliding birds; ■ The Project area is located on the migratory route, therefore the tunnel entry and exit points will be monitored during migration periods and bird protection corridors will be netted at these points, if necessary; ■ Bat species will be monitored throughout the construction period, including during the breeding and

[1]Turkish Statistical Institute, 2020 Hatay Municipality Solid Waste Statistics

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
	3) emission of noise and vibration. 4) railway and highway traffic. 5) emission of light. 6) introduction and spreading of alien species. As a result of environmental impact assessment studies, the impacts on natural habitat and critical habitats are expected as low level with the implementation of mitigation measures defined in the ESIA as well as Biodiversity Management Plan.	on target species (globally EN, CR and VU species) and large-winged gliding birds ▪ bird migration densities of the tunnel entry and exit points will be monitored during migration periods and protection corridors will be created with netting to protect birds at these points. ▪ vulnerable bat species (Vormela peregusna, Miniopterus schreibersii, Rhinolophus mehelyi, Nyctalus lasiopterus, and Myotis capaccinii) have been recorded in the LSA. – To prevent bats from entering the tunnel, the entrance and exit should be covered with tarpaulin during evening hours until construction is complete. – Tunnel construction will be carried out during daylight hours when bats are inactive. – Insect attraction should be prevented by using lighting systems that do not emit heat. Bats are sensitive to light and noise. Emission of noise/vibrations and light mitigation measures will be followed. – Bat species will be monitored throughout the construction period, including during the breeding and mitigation phases. Based on the results of these monitoring studies, additional mitigation measures will be implemented if necessary. ▪ project personnel will be informed about the species and will be trained to avoid behaviours that may pose a threat to the mammal species (especially *Hyaena hyaena* and *Gazella gazella)*. ▪ In order to minimize direct impact on threatened flora species potentially present, pre-construction surveys will be implemented before vegetation clearance to identify flora species. ▪ pending its reuse, topsoil within the temporary facility footprint will be stripped before construction activities, appropriately stored, and used for restoration at the end of the construction phase. ▪ vehicle movement will be restricted to the existing roads that connect the construction sites with the surrounding areas and vehicle speed will be restricted to ≤35km/h. Off road driving will be prohibited in order to avoid any unnecessary disturbance of natural vegetation. 2) changes in local hydrology and water quality: ▪ culverts/channels will be used as appropriate in correspondence of river crossing or drainage features to avoid the interruption of waterways and drainage features and the formation of stagnant water. ▪ if erosion phenomena are observed environmental engineering techniques will be put in place to stop the erosion and ensure soil protection and the development of natural vegetation. 3) increase in vehicular traffic: ▪ install speed limits and animal crossing signs on the access roads and enforce speed limits along the site access road; ▪ avoid the accumulation of stagnant water and organic waste within the construction site roads, which could attract wildlife;	mitigation phases, especially in tunnel entrance and exit. ▪ Presence and spreading of invasive flora species within and around the construction sites will be monitored at least twice a year during the vegetative season by an expert botanist; if necessary, control campaigns will be put in place in order to avoid the spreading of the invasive species. Additional monitoring activities are defined in the Biodiversity Management Plan.

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
		▪ if employees and contractors encounter a fauna specimen while driving or mobilizing equipment, they will wait until it moves on by itself or they will ask the assistance of the Environmental technician for its safe removal and relocation in a suitable environment; ▪ raise awareness among employees and contractor mobilizing equipment on site about the protected species/habitats potentially present in the area, in order to ensure constant monitoring and promote actions to be taken if wildlife is encountered 4) <u>Emission of pollutants, dust and particulate matter</u>: ▪ speed limit for all vehicles will be implemented so as not to generate dust emissions, and all trucks will be properly maintained at all times; ▪ any unpaved access roads will be adequately compacted and periodically graded, maintained, and sprayed with water as needed, to minimize dust from vehicle movements. If water spraying is deemed insufficient, other means of surface treatment (e.g., hygroscopic media, such as calcium chloride, and soil natural–chemical binding agents) for unpaved access roads, or exposed stockpiles, will be implemented, by using a sprinkler system or a “water-mist cannon”; ▪ soil and any dusty material temporarily stored on site will be appropriately covered and managed to control dust emissions; ▪ if the topsoil and soil stockpiles are stored for a long period of time (more than 1 year), they will be planted with appropriate methods in order to avoid erosion from wind and rain, and to protect the organic matter content; ▪ Excavations will be stopped in the event of strong winds (generally wind speeds of 10 m/s or more). 5) emission of noise and vibration: ▪ night works will be avoided (from 8 pm to 6 am) in proximity of natural habitats to reduce impacts to nocturnal fauna species; ▪ rock blasting activities will be performed during daytime and at regular times to enhance local fauna habituation to noise and to avoid disturbance during critical hours for many species (dusk and dawn)). 6) <u>Emission of light</u>: ▪ it is recommended to keep the number of light sources to the minimum necessary to ensure driver safety; 7) introduction and spreading of alien species: ▪ the use of non-native flora species, and especially of species classified as invasive alien species must be avoided during rehabilitation/restoration works ▪ if spreading of invasive species is observed, an appropriate eradication program will be developed and implemented. ▪ **Rehabilitation/Restoration** Areas cleared during construction for temporary use, such as quarries, borrow sites, storage area for excess excavated material and blasting areas as well as Open-Close tunnels, will be restored, as soon as possible, with the goal of producing a stable	

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
		vegetative cover to minimize erosion, dust and spreading of invasive alien species, and the aim of re-establish the original habitat with a positive impact on biodiversity. Vegetation and topsoil restoration activities will be performed on all temporary facilities Only plants that are native to the region will be used for restoration, soil improvement, erosion control, stream banks and habitat rehabilitation. Additional mitigation measures are defined in the Biodiversity Management Plan.	
Social Components			
Within the study area, 9 neighborhoods are located in the directly affected area of the Railway route. Social studies were carried out in the Hatay Province as the following: ■ 9 Villages were visited, ■ 185 Household Level Survey were conducted, ■ 10 institutions and organizations were visited and in-depth interviewed were held with the representatives and experts of the institutions. Within the scope of the Project, Stakeholder Engagement Plan (SEP), Social Impact Assessment (SIA), Livelihood Restoration and Human Rights Impact Assessment (HRIA) were prepared. The expropriation process has not started as of September 2025. A total of 81 parcels are needed entirely or partially for the construction of the components of the Project. There are 66 private parcels and 15 public lands in the expropriation corridor containing the needed lands.	■ Population and Demography ■ Economy and Employment ■ Land Use and Land-based Livelihoods ■ Community Health and Safety ■ Labour and Working Conditions ■ Infrastructure, Utilities and Services ■ Gender Assessment ■ Vulnerable Groups Assessment ■ Human Rights Impact Assessment	It is possible to reduce the potential negative impacts emerged from the Project on the population and locals of the AoI if certain mitigation measures are taken, such as: ■ Project Specific Camp Site Management Plan (including Workers' Accommodation) in line with the IFC/EBRD's Guidance Note on Worker's Accommodation, 2009 will be developed and requirements listed in this plan will be periodically monitored. ■ Workers' accommodations will be designed in compliance with the processes and standards of the IFC/EBRD's Guidance Note on Worker's Accommodation, 2009, and the basic needs of the workers will be provided within the borders of the accommodation to limit the interaction of the workers with the local communities to prevent the pressure on the local utilities and the services. ■ Measures will be implemented to mitigate environmental impacts associated with increased population, such as waste management programs, and pollution control measures, to preserve the natural ecosystem and quality of life for residents. ■ A Human Rights Policy or a Human Rights Management Plan will be developed and implemented for the Project. ■ A community grievance mechanism ("GRM") will be established to record all complaints, including the anonymous complaints and necessary measures will be taken accordingly. The following mitigation measures will be implemented to minimize or reduce the negative impacts on land use and land-based livelihoods due to the Project: ■ Impacts on lands will be minimized as far as possible by keeping the Project construction footprint as narrow as possible, and efficiently restoring any damaged areas. ■ Physical and economic displacement impacts will be minimized during the design phase of the Project. ■ LRP was prepared and will be implemented to bridge the gaps between Turkish Expropriation Law and IFC PS-5. ■ During the Project, people will be supported to access accurate information, get reliable information about their legal procedures and communicate with the relevant authorities in order to see missing documents or transactions. ■ Seasonal workers will be identified and compensated for their losses if they work on land to be expropriated for the Project. ■ During the recruitment process priority will be provided to people who lost their livelihoods as a result of the establishment of the Project. ■ All construction works will be continued within the borders of the designated areas and in case of an unplanned damage, loss of the affected PAPs will be compensated by the contractors. ■ Before the start of the construction, the landowners/users will be allowed to harvest their crops and they will be informed in a timely manner. ■ A Community Liaison Officer will be hired and the stakeholder engagement and collect grievances. ■ Any business losses will be compensated at a full replacement value.	

Main Features of Current Situation	Potential Impacts	Mitigation Measures	Monitoring Activities
		▪ Temporary accommodation and storage areas will be built in locations that minimize impacts on land-based livelihoods, access to agricultural lands and natural resources, and will be rehabilitated and returned to their owners and communities at the end of the construction period. ▪ If compensation alone is not sufficient to restore livelihoods, livelihood restoration in accordance with IFC requirements will be implemented. ▪ A Community Grievance Mechanism will be established. ▪ All of the disturbed sites will be rehabilitated as appropriate and agreed upon, following the completion of construction works. Additional mitigation measures are defined in the Camp Site Management Plan, Human Rights Management Plan, Traffic Management Plan, Security Management Plan including Security Risk Assessment, Waste Management Plan, Occupational Health and Safety Management Plan, Community Health, Safety and Security Procedure, Environmental and Social Management Plan, Stakeholder Engagement Plan and Cultural Heritage Management Plan and Chance Find Procedures. .	
Cumulative Impacts			
A Cumulative Impact Assessment Study has been conducted to define cumulative potential impacts for the other projects around the Project area that describe below: ▪ Slag Recovery Plant ▪ Billet Production Plant ▪ Ready Mixed Concrete Plant ▪ Isdemir Sea Filling Area Project ▪ Anthracite Crushing Plant ▪ Adana Cement Plants Iskenderun-1 ▪ Isdemir ▪ NET Olive oil Plant ▪ Coal Storage Plant ▪ Dry Bulk Storage Plant	Because of the potential overlaps of the schedules of the projects, cumulative impacts are foreseen on the following physical, biological and social components: ▪ Water resources ▪ Soil Quality ▪ Air Quality ▪ Noise and Vibration ▪ Social ▪ Visual ▪ Biological ▪ Traffic and Infrastructure	No additional measures/monitoring activities are required other than the ones specified above.	

Environmental and Social Management System

To ensure the effective implementation of the mitigation measures proposed for the Project, adequate resources and project management planning will be undertaken, guided by an Environmental and Social Management Plan (ESMP) package available for the Project.

The ESMP is an integral part of ESIA as it is a systems specification document for the Project and its contractors and represents a commitment to environmental and social sustainability that applies to the Project's entire lifecycle.

The Environmental and Social Management System (ESMS) will be implemented (for both construction and operation phases) to ensure that the Project:

- complies with all applicable Turkish legislation as well as relevant IFC guidelines provided in the ESIA
- implements Good International Industry Practices (GIIP) to minimize potential environmental and social impacts during the construction, operation and decommissioning phases
- is executed in compliance with the commitments addressed in this report for the minimization of potential environmental and social impacts.
- works in accordance with high standards of safety
- cares for the protection of own employees and public
- promotes its policies through training, supervision, regular reviews and consultation
- generates local socio-economic benefits by using local and regional labour forces
- engages and communicates with the local community and other stakeholders through a stakeholder engagement programme.

The minimum requirements of an ESMS have been defined and will be established for the Project in order to mitigate the risks associated with:

- Environmental and Social Aspects
- Environmental and Social Management Plan
- Occupational Health and Safety, Labour Issues and Community Health & Safety aspects

DOĞUŞ-EZE JV has developed a set of ESMPs and procedures consistent with their policies and commitments, addressing the environmental and social impacts and relevant mitigation measures identified in the ESIA for each component. The full set of ESMPs that are prepared and will be implemented for fulfilling the commitments undertaken by the Project are presented in the table below with the relevant IFC PSs that each will contribute to comply with.

Table 3-2: ESMPs

Relevant IFC PS	Plans / Procedures
IFC PS1 5-24: Assessment and Management of Environmental and Social Risks and Impacts	■ Environmental and Social Governance Manuel ■ Environmental and Social Management and Monitoring Plan ■ Environmental and Social Training Plan ■ Stakeholder Engagement Plan ■ Management of Change Procedure ■ Monitoring and Review Procedure

Relevant IFC PS	Plans / Procedures
	■ Landscape Management Plan ■ Pre-Construction Survey Procedure
IFC PS2: Labour and Working Conditions	■ Camp Site Management Plan (including Workers' Accommodation) ■ Labor Management Plan ■ Contractor Management Plan ■ Supply Chain Management Plan ■ Occupational Health and Safety Plan ■ Hazard and Risk Assessment Procedure ■ Work Permit Procedure ■ Occupational Health and Safety Procedure in NATM Tunnels ■ Occupational Health and Safety Plan in TBM Tunnels ■ Blasting Procedure ■ Human rights management plan
IFC PS3: Resource Efficiency and Pollution Prevention IFC EHS Guidelines	■ Resource Efficiency Management Plan ■ Pollution Prevention Plan ■ Waste Management Plan ■ Soil Management and Erosion Control Plan ■ Spill Prevention and Response Plan ■ Hazardous Material Management Plan ■ Excavated Material and Dump Site Management Plan
IFC PS4: Community Health, Safety, and Security IFC EHS Guidelines	■ Traffic Management Plan ■ Security Management Plan including Security Risk Assessment ■ Community Health and Safety Management Plan ■ Emergency Readiness and Response Plan ■ Blasting Procedure
IFC PS5: Land Acquisition and Involuntary Resettlement	■ Livelihood Restoration Plan
IFC PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	■ Biodiversity Management Plan ■ Biodiversity Action Plan
IFC PS7: Indigenous Peoples	■ Not applicable
IFC PS8: Cultural Heritage	■ Cultural Heritage Management Plan and Chance Find Procedure

The ESMPs will be implemented:

- Across the DOĞUŞ-EZE JV Project organization, including, contractors, subcontractors and primary suppliers over which DOĞUŞ-EZE JV has control or influence and
- inside the study area including the associated facilities (as defined by IFC PS1: “facilities that are not funded as part of the Project and that would not have been constructed or expanded if the Project did not exist and without which the Project would not be viable”).

ESMPs will provide the objectives of the document, reference legal requirements, roles and responsibilities for its implementation, links to other management plans where necessary, a list of mitigation measures, monitoring and reporting requirements, qualitative or quantitative Key Performance Indicators (KPIs), Performance Indicators (PIs) and measures to be used to monitor the effectiveness of mitigation measures identified during the impact assessment process, training requirements where necessary. Alongside a similar structure, the level of detail and complexity of each management plan will be commensurate with the anticipated impacts and risks of the Project as identified in the ESIA. Each management plan will include mitigation measures identified in the relevant sections of the ESIA and will be disclosed to stakeholders as specified in the SEP. The ESMPs will be shared with all contractors to enable them to develop their own equivalent management plans, procedures and work instructions in line with the ESMP, with additional mitigation measures specific to their activities where necessary.

4.0 STAKEHOLDER ENGAGEMENT

A Stakeholder Engagement Plan (SEP) is prepared for the Hatay Hassa-Dörtyol Project by WSP Türkiye within the scope of the Environmental and Social Impact Assessment as a public document. The aim of SEP is to organise, record and formalise all engagement and consultation processes with the various stakeholders and corporate their views and concerns and addressed in them in the entire Project life.

Stakeholder Engagement Activities

Two public information meetings were held on July 31st, 2024, to represent the areas where the tunnel project's designated route enters and exits. The first meeting was held at the Karayılan Cultural Center, which was selected for its proximity to the entrance of the tunnel. The second meeting was held in the garden of the Bektaşlı neighborhood primary school. Approximately 20 individuals attended the first meeting, while approximately 200 individuals attended the second meeting, which was held at the exit side of the tunnel.

Following the public information meetings, a series of interviews were conducted with relevant institutions throughout the fieldwork process. The interviews provided insight into the population under the management of the institution, the economic situation of the people and the region, livelihoods, education, and employment participation. Additionally, the representatives of the institutions were updated on the Project, and their questions were addressed. The list of meetings held is available in Table 4-1.

Table 4-1: Stakeholder Engagement Activities

Date	Institution
31.07.2024	Iskenderun District Governorship
31.07.2024	Deputy Mayor of Iskenderun
01.08.2024	Isdemir Management Team
02.08.2024	Deputy Mayors of Hassa Municipality
02.08.2024	Bektaşlı, Dedeçınar, Balarmudu and Deliçay (Demrek) Mukhtars
03.08.2024	Bektaşlı Opinion Leader

Date	Institution
04.08.2024	Balarmudu Opinion Leader
04.08.2024	Dedeçınar Opinion Leader
05.08.2024	Deputy Mayor of Kirikhan
05.08.2024	Kirikhan District Governor's Office Private Secretary

Disclosure Process

Upon approval, the Project documents, including but not limited to the full ESIA, SEP, and other management plans will be disclosed electronically on the website of the Project and will be available in Turkish and English. In addition, hard copies of the SEP and NTS will be available in the mukhtars' offices in the affected settlements.

Further announcement regarding the Project updates and awareness, following tools will be used:

- Project website,
- Social media,
- The notice boards of the mukhtars' offices, and
- Leaflets and banners.

It is anticipated that NGOs, associations, and other interested organizations will be notified on the disclosure process and website links for the Project documents will be shared. When requested, hard copies of the disclosure package will be sent via post mail.

During the Project development and construction phase, the CLOs will prepare monthly reports that present the Project's social performance and the engagement activities, and the grievance mechanism outputs.

5.0 GRIEVANCE MECHANISM

A grievance refers to any complaint, opinion, or feedback related to the implementation and impact of a project. The Grievance Mechanism is the primary tool for stakeholders to voice concerns, provide feedback, and file complaints about the Project. Its goal is to respond to stakeholder needs and build a trusting relationship by developing effective mitigation strategies. The key objectives of the grievance mechanism include:

- Providing culturally appropriate ways for affected individuals to express concerns throughout the Project lifecycle.
- Ensuring complaints remain confidential.
- Establishing transparent, respectful relationships with communities.
- Identifying and implementing corrective actions.
- Verifying that affected people are satisfied with the actions taken.
- Avoiding legal disputes, though it does not restrict stakeholders' access to the legal system.

5.1 Governmental Grievance Mechanism- All stakeholders

The public can raise any issues, complaints, and requests through the Presidential Communication Centre (CIMER). This centre is an active 24-hour online national system developed by the Directorate of

Communications to keep the channels of communication open between the public and the government. The public can raise issues, complaints, and requests at any time and from anywhere. Issues, complaints, and requests can be both received and responded to through this national online system.

The CIMER system allows stakeholders to communicate directly with AYGM during the construction phase and with TCDD and KGM during the operational phase.

5.2 Worker Grievance Mechanism

A Project-specific Worker Grievance Mechanism will be developed and implemented. All direct and indirect employees of the Project will follow the Grievance Mechanism Procedure to be established. The procedure defines a grievance as a statement of dissatisfaction with any condition that is alleged to be detrimental to the employee. A grievance may relate to matters of internal communication, abuse of authority, race, colour, ancestry, national origin, religion, age, sex, sexual orientation, gender identity, sexual harassment, or disability status.

All complainants have the right to remain anonymous and to maintain their confidentiality. DOĞUŞ-EZE JV will not disclose complainants' details without their consent. If such consent is given, only the managers and staff involved in the specific complaint will be informed.

5.3 Community Grievance Mechanism

A Project-specific Community Grievance Mechanism will be developed and implemented. The grievance mechanism will be part of the management system. It will respond to any concerns and complaints, especially from affected stakeholders and communities. Special attention will be given to the training of the designated staff involved in the management of the grievance mechanism. The overall objective of the grievance mechanism is to provide an opportunity for all stakeholders to obtain information about Client's activities and facilities, to submit their complaints and concerns in a structured and formal manner, and to receive prompt, fair and effective responses.

Comments or concerns may be made to the Client verbally, in writing (by post or email) or by completing a Grievance Form. The form will be made available on the Project website, at the Project site and at the Mukhtar's office, along with a description of the mechanism. All grievances will be:

- acknowledged within seven days of receipt; and
- responded to no later than 30 days after receipt.

In particular, nominated, and trained staff will record information about grievances in grievance register. The information in the grievance register will include details of the grievance, and how and when it was submitted, acknowledged, responded to, and closed.

Individuals may request that their names remain confidential, and this mechanism does not preclude the right of stakeholders to pursue grievances through other legal means.

- Step 1: Receipt of complaint,
- Step 2: Assessment,
- Step 3: Acknowledgement of complaint,
- Step 4: Investigation and resolution of the complaint,
- Step 5: Closure, and
- Step 6: results of corrective action.

The grievance mechanism is widely publicized, with stakeholder meetings held for project-affected communities. Additional meetings will be organized for women PAPs and vulnerable groups to share information on the grievance mechanism, which also allows for anonymous complaints.

The CLO team appointed by Client will consist of one male and one female. The grievances will be reviewed by the team in accordance with the Project's human rights and grievance mechanism.

The Project will have communication tools such as public relation office, Project website. In addition to this, grievances can be filed through the interviews by face-to-face, on-line or telephone. Grievance forms will also be found in easily accessible places such as common usage areas in the settlements, public relation office and Project management office. The grievance forms (please see Appendix A) will be kept in print where wish-complaint boxes placed at specific points and will be used for the submission of both anonymous and public complaints.

Table 2: Current Contact Details of the Project*

Contact Details	
Project Website	https://www.dortyolhassa.com.tr/
Phone Number	+90 536 907 88 04
E-mail	info@dortyolhassa.com.tr

**Since the construction of the Project has not been started as of December 2024, the names of the responsible persons have not been designated yet. During the update of the Project SEP report, the names and the communication details will be presented in detail.*

When both external and internal stakeholders experience problems, concerns, or difficulties in providing their contact information, identification information, complaints submitted by stakeholders will be initially evaluated and recorded as anonymous complaints or anonymous suggestions.

Stakeholders can send all their wishes and complaints, without specifying their names, to the wish-complaint boxes placed at specific points for external stakeholders or via hotline.

Grievances are received anonymously and assessed by applying the steps defined in the workflow. Within the scope of the complaint, it will be evaluated through investigation / examination processes and each stage will be recorded in the complaint mechanism system. Third parties will not be informed about complaints that need to be kept confidential.

When the complaint is concluded, although there will be no formal feedback on the solution to be implemented, if it is an issue that needs to be informed by the public and if deemed necessary, it can be announced to the stakeholders through common boards/ public and general communication tools.

Stakeholder request and grievance form of the Project is presented in Appendix A and ESIA Feedback Form is presented in Appendix B.

Signature Page

WSP Danışmanlık ve Mühendislik Ltd. Şti.

DK/MA

APPENDIX A

Grievance Form

	ŞİKAYET FORMU COMPLAINT FORM	

Şikâyetin Alındığı Yer/ Location Of Complaints Received		**Tarih/** Date
Alan Yetkilinin Adı/ Name Of Person In Charge		**Şikâyet Kayıt No/** Complaint Register Number
Şikâyete Konu Alanın Koordinatları/ Coordinates Of The Area Subject To Complaint		
ŞİKÂYET SAHİBİ HAKKINDA BİLGİ / COMPLAINANT INFO **Şikâyet Sahibi kimlik bilgilerini vermeden anonim olarak doldurabilir, ancak kendisine geri dönüş şeklini bu formda belirtmesi gerekmektedir. /** The Complainant may submit application anonymously, however in this form the Complainant should indicate the feedback mechanism to respond.		
Ad Soyad/ **Name Surname**		**Şikâyetin Geliş Yolu /** Form of Complaint:
TC Kimlik No/ Identification Number		**Telefon- Ücretsiz hat /** Phone –Free phone line ☐
Telefon/ E-Posta Telephone/ E-mail		**İstişareToplantısı/** Consultation meeting ☐
Mahalle-Köy-İlçe-İl/ Neighborhood-Village –District - Province		**Dilekçe** / Petition ☐
ŞİKÂYET DETAYLARI / DETAILS OF COMPLAINT		
Şikâyet Konusu / Complaint		
Şikâyet sahibi tarafından talep edilen çözüm / Solution requested by the Complainant		
Şikâyeti Alan Yetkilinin Ad Soyad ve İmzası / Şikâyet Sahibinin Ad Soyad ve İmzası / Name Surname and Signature of the Registerer Name Surname and Signature of Complainant		

	ŞİKAYET FORMU COMPLAINT FORM	

Şikâyet Kapatma Numarası: Grievance Closure No:	
Alınması Gereken Acil Önlemleri Tanımlayın: Identify the urgent actions	
Alınması Gereken Uzun Vadeli Önlemleri Tanımlayın (Gerekli ise): Identify the long term actions (if necessary)	
Tazminat Talebi Bulunuyor Mu? Is there a claim for compensation?	☐ **Evet/**Yes ☐ **Hayır/**No
DÜZELTİCİ FAALIYETIN KONTROLÜ VE KARARI / CONTROL AND DECISION OF CORRECTIVE ACTION	
Düzeltici Faaliyetin Aşamaları Stages of Corrective Action	**Verilen Sürenin Sona Erdiği Tarih ve Yetkili Kuruluşlar** Date of Expiration of the Given Period and Authorized Institutions
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
Sorumlu Departmanlar Accountable departments	
Sonlandirma Tarihi Sign off date	
Tazminat Eylemi & Sonlandirilmasi Compensation Action & Sign off	
Bu bölüm sikayetçi tarafindan, tazminatı aldıgında ve dosya kapandığında doldurulup imzalanacaktır. This part will be filled and signed by the complainant when he/she receives the compensation and file is closed. **Tarih /** Date: …/…. /… **İsim Soyadı ve İmza:** Name Surname and Signature:	

APPENDIX B

ESIA Feedback Form

You can write your questions and opinions about the Environmental and Social Impact Assessment study prepared Project to the following addresses.

ESIA Feedback Form	
Name-Surname	
Address	
Phone Number	
Date	
Concerns, expectations, questions or complaints on the ESIA report	



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